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Suppression Technology, Modul- and Interfacetechnology Power Supplies



1958 - 2008 | 50 Years



Tradition in Automation

Reaching new heights in automation



Welcome to Lütze

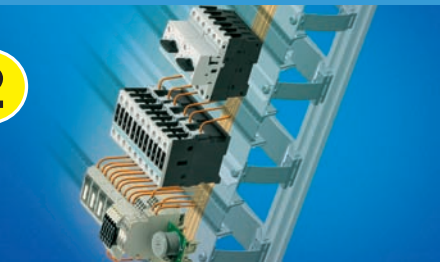
Machine and system installation procedure

1



Control cabinet LSC wiring systems

2



Suppression technology, module and interface technology, power supplies

3



Railway engineering and automation

4



We have been developing and manufacturing electronic and electrical engineering solutions for controls and installations for more than 50 years.

Our basic concept as system suppliers, providing a comprehensive and well-matched product range with which we can generate innovative and customized solutions for our customers, has stood the test of time.

The close relationship between product development and customer requirements allows Lütze continuously to improve and develop our products for the various markets.

Lütze systems comply with the highest industrial standards; Lütze solutions mean improvement and innovation.

Our four product groups include components and concepts suitable for almost any control application. For more information on our products, please visit www.luetze.com.



Systematic Technology

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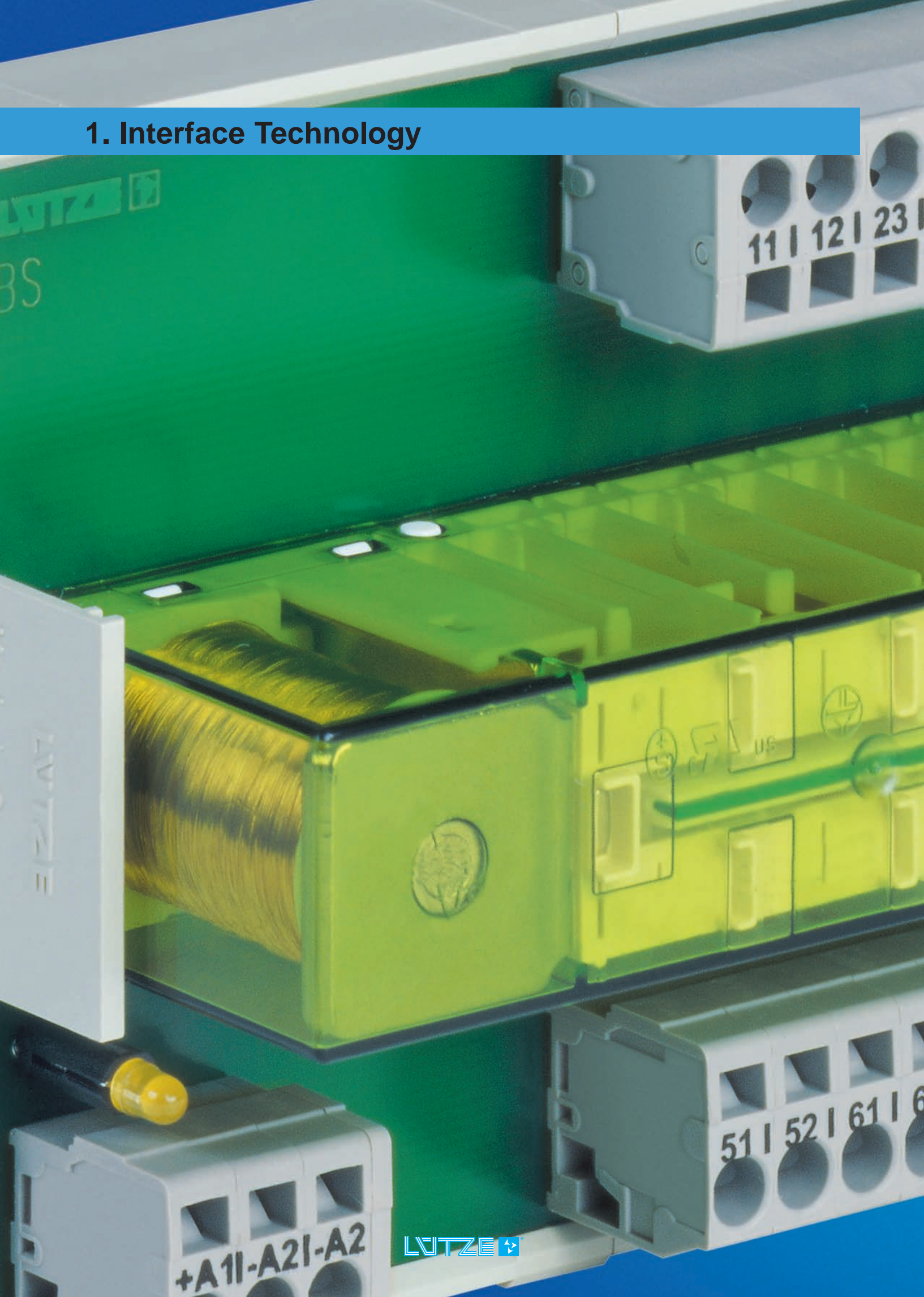
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Technical information is available for downloading at www.luetze.com!

1. Interface Technology



Interface Technology · Overview standard signal converter



6,2 mm, 5-poles



6,2 mm, 6-poles



6,2 mm, 8-poles



17,5 mm, 12-poles

Single standard signal converter

| Input | | | galv. Isolation | | Output | | | Rated voltage | | Insulation voltage i/o | Accuracy FSR | Housing | | | Art.-Number | Type | Page |
|-----------|------------|------------|-----------------|-------|-----------|------------|------------|---------------|----------------|------------------------|--------------|--------------|--------------|----------------|-------------|------|------|
| 0 ... 10V | 0 ... 20mA | 4 ... 20mA | 2-way | 3-way | 0 ... 10V | 0 ... 20mA | 4 ... 20mA | AC/DC 24V | AC/DC 24V-240V | | | 6,2mm, 5pole | 6,2mm, 6pole | 17,5mm, 12pole | | | |
| • | | | • | | • | | | • | | 1,5kV | 0,1% | • | | 750500 | WAA 6-0500 | 1.11 | |
| • | | | • | | • | • | | • | | 1,5kV | 0,1% | • | | 750501 | WAA 6-0501 | 1.11 | |
| • | | | • | | • | | • | • | | 1,5kV | 0,1% | • | | 750502 | WAA 6-0502 | 1.11 | |
| | • | | • | | • | | | • | | 1,5kV | 0,1% | • | | 750503 | WAA 6-0503 | 1.12 | |
| | • | | • | | • | • | | • | | 1,5kV | 0,1% | • | | 750504 | WAA 6-0504 | 1.12 | |
| | • | | • | | • | | • | • | | 1,5kV | 0,1% | • | | 750505 | WAA 6-0505 | 1.12 | |
| | | • | • | | • | | | • | | 1,5kV | 0,1% | • | | 750506 | WAA 6-0506 | 1.13 | |
| | | • | • | | • | • | | • | | 1,5kV | 0,1% | • | | 750507 | WAA 6-0507 | 1.13 | |
| | | • | • | | • | | • | • | | 1,5kV | 0,1% | • | | 750508 | WAA 6-0508 | 1.13 | |
| • | | | | • | • | | | • | | 1,5kV | 0,1% | | • | 750530 | WAA 7-0530 | 1.18 | |
| • | | | | • | • | | • | • | | 1,5kV | 0,1% | | • | 750531 | WAA 7-0531 | 1.18 | |
| • | | | | • | • | | • | • | | 1,5kV | 0,1% | | • | 750532 | WAA 7-0532 | 1.18 | |
| | • | | | • | • | | | • | | 1,5kV | 0,1% | | • | 750533 | WAA 7-0533 | 1.19 | |
| | • | | | • | • | | • | • | | 1,5kV | 0,1% | | • | 750534 | WAA 7-0534 | 1.19 | |
| | • | | | • | • | | • | • | | 1,5kV | 0,1% | | • | 750535 | WAA 7-0535 | 1.19 | |
| | | • | | • | • | | | • | | 1,5kV | 0,1% | | • | 750536 | WAA 7-0536 | 1.20 | |
| | | • | | • | • | | • | • | | 1,5kV | 0,1% | | • | 750537 | WAA 7-0537 | 1.20 | |
| | | • | | • | • | | • | • | | 1,5kV | 0,1% | | • | 750538 | WAA 7-0538 | 1.20 | |

Multi signal converter

| Input | | | | galv. Isolation | | Output | | | Rated voltage | | Insulation voltage i/o | Accuracy FSR | Housing | | | Art.-Number | Type | Page |
|-----------|------------|------------|------------------|-----------------|--------|-----------|------------|------------|---------------|----------------|------------------------|--------------|--------------|--------------|----------------|-------------|------|------|
| 0 ... 10V | 0 ... 20mA | 4 ... 20mA | weitere Bereiche | 2-Wege | 3-Wege | 0 ... 10V | 0 ... 20mA | 4 ... 20mA | AC/DC 24V | AC/DC 24V-240V | | | 6,2mm, 5pole | 6,2mm, 6pole | 17,5mm, 12pole | | | |
| • | • | • | | • | | • | • | • | • | | 1,5kV | 0,1% | • | | 750509 | WAA 6-0509 | 1.14 | |
| • | • | • | | • | | • | • | • | • | | 1,5kV | 0,1% | • | • | 750539 | WAA 6-0539 | 1.21 | |
| • | • | • | | • | | • | • | • | • | • | 4,0kV | 0,1% | | • | 750510 | WNAA 6-0510 | 1.24 | |
| • | • | • | •2) | • | | • | • | • | • | • | 4,0kV | 0,1% | | • | 750516 | WAA 6-0516 | 1.25 | |
| • | • | • | •2) | • | | • | • | • | • | • | 4,0kV | 0,1% | | • | 750517 | WAA 6-0517 | 1.25 | |

2) adjustable range: 0-60mV, 0-100mV, 0-300mV, 0-500mV / 0-1V, 0-2V, 0-5V, 0-10V, 0-20V, 2-20V / 0-5mA, 0-10mA, 0-20mA, 4-20mA, ±5mA, ±20mA

Interface Technology · Overview standard signal converter



6,2 mm, 5-pole



6,2 mm, 6-pole



6,2 mm, 8-pole



12,5 mm, 8-pole



17,5 mm, 12-pole

Frequency signal converter

| Input | | | | galv. Isolation | | Output | | | | Rated voltage | | Insulation voltage i/o | Accuracy FSR | Housing | | | Art.-Number | Type | Page |
|-----------|------------|------------|-------------|-----------------|--------|-----------|------------|------------|-------------|---------------|----------------|------------------------|--------------|--------------|--------------|----------------|-------------|------|------|
| 0 ... 10V | 0 ... 20mA | 4 ... 20mA | 0 ... 28kHz | 2-Wege | 3-Wege | 0 ... 10V | 0 ... 20mA | 4 ... 20mA | 0 ... 28kHz | AC/DC 24V | AC/DC 24V-240V | | | 6,2mm, 5pole | 6,2mm, 6pole | 17,5mm, 12pole | | | |
| • | • | • | • | • | • | • | • | • | • | • | • | 1,5kV | 0,1% | • | 750511 | WNAF 6-0511 | 1.15 | | |
| • | • | • | • | • | • | • | • | • | • | • | • | 4,0kV | 0,1% | • | 750512 | WNAF 6-0512 | 1.27 | | |
| • | • | • | • | • | • | • | • | • | • | • | • | 4,0kV | 0,1% | • | 750524 | WNFA 6-0524 | 1.28 | | |

Passive standard signal converter

| Input | | | | galv. Isolation | | Output | | | | Rated voltage | | Insulation voltage i/o | Accuracy FSR | Housing | | | | Art.-Number | Type | Page |
|------------|------------|-----------------|-----------|-----------------|--------|-----------|------------|------------|-------------|---------------|----------------|------------------------|--------------|--------------|--------------|----------------|---------------|-------------|------|------|
| 0 ... 20mA | 4 ... 20mA | 1-kanalig | 2-kanalig | 2-Wege | 3-Wege | 0 ... 10V | 0 ... 20mA | 4 ... 20mA | 0 ... 10kHz | AC/DC 24V | AC/DC 24V-240V | | | 6,2mm, 5pole | 6,2mm, 6pole | 6,2mm, 8pole | 12,5mm, 8pole | | | |
| • | • | • | • | • | • | • | • | • | • | - | - | 0,5kV | 0,1% | • | 750513 | WPAA 6-0513 | 1.16 | | | |
| • | • | • | • | • | • | • | • | • | • | - | - | 0,5kV | 0,1% | • | 750521 | WPAA 6-0521 | 1.17 | | | |
| • | • | • | • | • | • | • | • | • | • | - | - | 1,5kV | 0,1% | • | 750526 | WPAA 7-0526 | 1.22 | | | |
| • | • | • ³⁾ | • | • | • | • | • | • | • | - | - | 1,5kV | 0,1% | • | 750528 | WPAA 7-0528.22 | 1.23 | | | |
| • | • | • | • | • | • | • | • | • | • | - | - | 1,5kV | 0,1% | • | 750527 | WPAA 7-0527 | 1.23 | | | |
| • | • | • | • | • | • | • | • | • | • | - | - | 1,5kV | 0,1% | • | 750529 | WPAA 7-0529 | 1.23 | | | |

3) These passive converter has an non-reactive transmission, so that during an output interruption the current in the input is not interrupted.

Signal-converter for building automation (manual/auto)

| Input | | | | galv. Isolation | | Output | | | | Rated voltage | | Insulation voltage i/o | Accuracy FSR | Housing | | | Art. Number | Type | Page |
|-----------|------------|------------|-------|-----------------|--------|-----------|------------|------------|-------|---------------|----------------|------------------------|--------------|--------------|--------------|----------------|-------------|------|------|
| 0 ... 10V | 0 ... 20mA | 4 ... 20mA | + 10V | 2-Wege | 3-Wege | 0 ... 10V | 0 ... 20mA | 4 ... 20mA | + 10V | AC/DC 24V | AC/DC 24V-240V | | | 6,2mm, 5pole | 6,2mm, 6pole | 17,5mm, 12pole | | | |
| • | • | • | • | • | • | • | • | • | • | • | • | 4,0kV | 0,1% | • | 750518 | WNAA 6-0518 | 1.26 | | |
| • | • | • | • | • | • | • | • | • | • | • | • | 4,0kV | 0,1% | • | 750529 | WNAA 6-0519 | 1.26P | | |

Programmable limit switch

| Input | | | | galv. Isolation | | Output | | | | Rated voltage | | Insulation voltage i/o | Accuracy FSR | Housing | | | Art. Number | Type | Page |
|-----------|-----------|------------|------------|-----------------|-------|---|---|--------|----------------|---------------|--------------|------------------------|--------------|----------------|--------|------------|-------------|------|------|
| 0 ... 10V | 2 ... 10V | 0 ... 20mA | 4 ... 20mA | 2-way | 3-way | Limit value A semi-conductor output AC/DC 30V/100mA | Limit value B semi-conductor output AC/DC 30V/100mA | DC 24V | AC/DC 24V-240V | 6,2mm, 5pole | 6,2mm, 8pole | | | 17,5mm, 12pole | | | | | |
| • | • | • | • | • | • | • | • | • | • | • | • | 2,5kV | 0,1% | • | 750101 | WLS 7-0101 | 1.29 | | |

Interface Technology · Overview special signal converter



6,2mm, 6pole



6,2mm, 8pole



17,5mm, 12pole



22,5mm, 8pole



22mm, 16pole

Monitoring modules

| Input | | | | | | galv. Isolation | | | Output | | | | Rated voltage | | Insulation-voltage i/o | Accuracy FSR | Housing | | | Art-Number | Type | Page |
|-----------|-----------------|----------|-----------------|----------|------------|-----------------|-------|-------|-----------------|--------------------|------------|-----------|---------------|------------|------------------------|--------------|---------|-----------|--------------|------------|-------------|------|
| 250mA, DC | 0 ... 1A, AC/DC | 0 ... 1A | 0 ... 5A, AC/DC | 0 ... 5A | 16 ... 24V | without | 2-way | 3-way | 1 Relay with 1W | 2 Relay with je 1W | Transistor | 0 ... 10V | 0 ... 20mA | 4 ... 20mA | | | DC 24V | AC/DC 24V | 6,2mm, 8pole | | | |
| • | | | | | | • | | | | • | | | | | | | • | | | 730866 | LVUE 4-0866 | 1.32 |
| | • | | | | | | | | | • | | | | | | • | | | | 750100 | CCR 6-0100 | 1.31 |
| | | • | | | | | | | | | • | • | | | | • | | | | 750540 | WAA 7-0540 | 1.30 |
| | | | • | | | | | | | | • | • | • | • | | • | | | | 750541 | WAA 7-0541 | 1.30 |

Special signal converter

| Input | | | | | | galv. Isolation | | | Output | | | | Rated voltage | | Insulation-voltage i/o | Accuracy FSR | Housing | | | Art-Number | Type | Page | |
|----------------------|------------|-------------|----------|-----------|------------|-----------------|---------|-------|--------|----------|-----------|------------|---------------|--------|------------------------|--------------|-------------|-----------|---------------|------------|--------|-------------|--------------|
| Full bridge, 5 / 10V | 0 ... 60mV | 0 ... 500mV | 0 ... 1V | 0 ... 10V | 0 ... 200V | 4 ... 20mA | without | 2-way | 3-way | 0 ... 5V | 0 ... 10V | 0 ... 20mA | 4 ... 20mA | DC 24V | | | DC 24V-110V | AC/DC 24V | AC/DC 24-240V | | | | 6,2mm, 6pole |
| • | | | | | | | • | | | | • | • | • | • | | | | | • | | 750522 | WBRA 6-0522 | 1.38 |
| | • | | | | | | | | | • | • | • | • | | | | | | • | | 750550 | WNAA 7-0550 | 1.33 |
| | | • | | | | | | | | • | • | • | • | | • | | | | • | | 750854 | WNAA 6-0854 | 1.37 |
| | | | | | | | | | | • | • | • | • | | • | | | | • | | 750901 | WAA 7-0901 | 1.34 |
| | | | | | | • | | | | • | • | • | • | | • | | | | • | | 750906 | WAA 7-0906 | 1.35 |
| | | | • | • | | • | | | | • | • | • | • | | • | | | | • | | 750910 | WNAA 6-0910 | 1.36 |

Constant voltage source

| Input | | | | | | galv. Isolation | | | Output | | | | Rated voltage | | Insulation-voltage i/o | Accuracy FSR | Housing | | | Art-Number | Type | Page | |
|----------------------|------------|-------------|----------|-----------|------------|-----------------|------|--------|--------|----|-----------------|-----|---------------|--------|------------------------|--------------|-------------|-----------|---------------|------------|--------|-----------|--------------|
| Full bridge, 5 / 10V | 0 ... 60mV | 0 ... 500mV | 0 ... 1V | 0 ... 10V | 0 ... 200V | 4 ... 20mA | ohne | 2-Wege | 3-Wege | 5V | 10V (9 ... 11V) | 15V | 20V | DC 24V | | | DC 24V-110V | AC/DC 24V | AC/DC 24-240V | | | | 6,2mm, 6pole |
| | | | | | | | • | | | | • | | | | | | | | • | | 762184 | CV 7-2184 | 1.39 |

Interface Technology · Overview Relay Module



6,2mm, 5pole



6,2mm, 6 - 8pole



6,2mm, pluggable



Microcompact



Minicompact



Varioprint

Relay module, closed, open

| | Control voltage | | | Connection | | Housing | | | | | | Page | | | | | | |
|-----------------------------|-----------------|--------|--------|------------|---------|-----------|------------|------------|----------------|-----------------|-------------|------|-------------|-------------|-----------------|--------------|-------------|------------|
| | DC 12V | DC 24V | DC 36V | DC 72V | DC 110V | AC/DC 24V | AC/DC 115V | AC/DC 230V | screw terminal | spring terminal | 6,2mm 5pole | | 6,2mm 6pole | 6,2mm 8pole | 6,2mm pluggable | Microcompact | Minicompact | Varioprint |
| 1 Relay with each | | | | | | | | | | | | | | | | | | |
| 1 N/O-contact | | | | | | • | • | • | • | | | | | | | • | | 1.81 |
| 1 N/O-contact + HTV | | • | | | | • | • | • | • | | | | | | | • | | 1.84 |
| | | | | | | • | • | • | • | | | | | | | • | | 1.81 |
| 1 Change over contact | • | • | | | | • | • | • | • | • | | • | | | | | | 1.69 |
| | | • | | | | • | • | • | • | • | | | | | | | | 1.72 |
| | | | | | | • | • | • | • | • | | | | | | • | | 1.82 |
| | | | | | | • | • | • | • | • | | | | | | • | | 1.85 |
| 1 Change over contact + HTV | | • | • | • | • | • | • | • | • | • | | • | | | | | | 1.70 |
| | | | | | | • | • | • | • | • | | | | | | • | | 1.73 |
| | | | | | | • | • | • | • | • | | | | | | • | | 1.82 |
| 2 Change over contact | | • | | | | • | • | • | • | • | | | | | | • | | 1.83 |
| | | • | | | | • | • | • | • | • | | | | | | • | | 1.86 |
| 2 Change over contact + HTV | | • | | | | • | • | • | • | • | | | | | | • | | 1.86 |
| | | | | | | • | • | • | • | • | | | | | | • | | 1.80 |
| 2 Change over contact | | | | | | • | • | • | • | • | | | | | • | | | 1.78 |
| 2 N/O-contact | | | | | | | | | | | | | | | | | | |
| 2 Relay with each | | | | | | | | | | | | | | | | | | |
| 1 N/O-contact | | • | | | | • | • | • | • | • | | | • | | | | | 1.71 |
| | | | | | | • | • | • | • | • | | | | | • | | | 1.74 |
| 1 Change over cont. | | | | | | • | • | • | • | • | | | | | • | | | 1.75 |
| 1 Change over cont. + HTV | | | | | • | • | • | • | • | • | | | | | • | | | 1.76 |
| | | • | | | | • | • | • | • | • | | | | | • | | | 1.77 |
| 2 Change over cont. | | | | | | • | • | • | • | • | | | | | • | | | 1.79 |
| 1 Change over cont. + HTV | | | | | | • | • | • | • | • | | | | | • | | | 1.79 |
| 1 N/O-contact | | | | | | • | • | • | • | • | | | | | • | | | |

Relay module, pluggable

| | Control voltage | | | Connection | | Housing | | | | | | page | | | | | | |
|---------------------------|-----------------|--------|--------|------------|---------|-----------|------------|------------|----------------|-----------------|-------------|------|-------------|-------------|-----------------|--------------|-------------|------------|
| | DC 12V | DC 24V | DC 36V | DC 72V | DC 110V | AC/DC 24V | AC/DC 115V | AC/DC 230V | screw terminal | spring terminal | 6,2mm 5pole | | 6,2mm 6pole | 6,2mm 8pole | 6,2mm pluggable | Microcompact | Minicompact | Varioprint |
| 1 Relay with each | | | | | | | | | | | | | | | | | | |
| 1 Change over cont. | • | • | | | | • | • | • | • | • | | | | • | | | | 1.87 |
| 1 Change over cont. + HTV | | • | | | | • | • | • | • | • | | | | • | | | | 1.88 |
| 2 Change over cont. | | • | | | | • | • | • | • | • | | | | • | | | • | 1.99 |

Interface Technology · Overview Relay Module



Microplug 15,2mm



Microplug 27mm



Varioprint 17,5mm



Varioprint 30mm



Varioprint 35mm



Varioprint 50mm

Relay module, pluggable, Microplug

| | Control voltage | | | | | | | | Connection | | Housing | | | | | Page | |
|---------------------------|-----------------|--------|---------|---------|--------|--------|---------|---------|----------------|-----------------|------------------|----------------|-------------------|-----------------|-----------------|------|-----------------|
| | DC 12V | DC 24V | DC 115V | DC 230V | AC 12V | AC 24V | AC 120V | AC 230V | screw terminal | spring terminal | 15,2mm Microplug | 27mm Microplug | 17,5mm Varioprint | 30mm Varioprint | 35mm Varioprint | | 50mm Varioprint |
| 1 Relay with each | | | | | | | | | | | | | | | | | |
| 1 Change over cont. | • | • | • | | | | | | • | | • | | | | | | 1.89 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.90 |
| 1 Change over cont. + HTV | • | • | • | | | | | | • | | • | | | | | | 1.89 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.90 |
| 2 Change over cont. | • | • | • | | | | | | • | | • | | | | | | 1.91 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.92 |
| 2 Change over cont. + HTV | • | • | • | | | | | | • | | • | | | | | | 1.91 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.92 |
| 2 Change over cont. | • | • | • | | | | | | • | | • | | | | | | 1.93 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.94 |
| 2 Change over cont. + HTV | • | • | • | | | | | | • | | • | | | | | | 1.93 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.94 |
| 3 Change over cont. | • | • | • | | | | | | • | | • | | | | | | 1.95 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.96 |
| 3 Change over cont. + HTV | • | • | • | | | | | | • | | • | | | | | | 1.95 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.96 |
| 4 Change over cont. | • | • | • | | | | | | • | | • | | | | | | 1.97 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.98 |
| 4 Change over cont. + HTV | • | • | • | | | | | | • | | • | | | | | | 1.97 |
| | | | | | • | • | • | • | • | | • | | | | | | 1.98 |

Relay socket

| | Control voltage | | | | | | | | Connection | | Housing | | | | | Page | |
|-------------------|-----------------|--------|------------|---------|--------|--------|---------|------------|----------------|-----------------|------------------|----------------|-------------------|-----------------|-----------------|------|-----------------|
| | DC 12V | DC 24V | DC 24-230V | DC 230V | AC 12V | AC 24V | AC 120V | AC/DC 230V | screw terminal | spring terminal | 15,2mm Microplug | 27mm Microplug | 17,5mm Varioprint | 30mm Varioprint | 35mm Varioprint | | 50mm Varioprint |
| 1 Relay with each | | | | | | | | | | | | | | | | | |
| 1 Wechsler | | • | | | | | | | • | | | | • | | | | 1.100 |
| 2 Wechsler | | • | | | | | | | • | | | | • | | | | 1.100 |
| 4 Wechsler | | • | | | | | | • | • | | | | | • | | | 1.101 |
| | | • | | | | | | • | • | | | | • | | | | 1.103 |
| 2 Relais mit je | | | | | | | | | | | | | | | | | |
| 4 Wechsler | | • | • | | | | | • | • | | | | | | • | | 1.102 |

Interface Technology · Overview Relay Module



Microcompact 17,5mm



Microcompact 22,5mm



Minicompact 22,5mm



Varioprint 35mm



Varioprint 65mm



Varioprint 90mm

Relay module with positively driven contacts

| | Control voltage | | | | | | | Connection | | Housing | | | | | | Page |
|---------------------|-----------------|---------|---------|--------|--------|---------|---------|----------------|-----------------|---------------------|---------------------|--------------------|-----------------|-----------------|-----------------|-------|
| | DC 24V | DC 110V | DC 230V | AC 12V | AC 24V | AC 120V | AC 230V | screw terminal | spring terminal | 17,5mm Microcompact | 22,5mm Microcompact | 22,5mm Minicompact | 35mm Varioprint | 65mm Varioprint | 90mm Varioprint | |
| 1 Relay with each | | | | | | | | | | | | | | | | |
| 1 Opener/Closer / | | | | | | | | | | | | | | | | |
| 1 N/O contact + HTV | • | • | | | | | | • | • | | | | • | | | 1.105 |
| 2 Opener/Closer / | • | • | | | | | | • | • | | • | | | | | 1.104 |
| 4 N/O contact + HTV | • | • | | | | | | • | • | | | | | • | | 1.106 |
| 3 Opener/Closer / | | | | | | | | | | | | | | | | |
| 5 N/O contact + HTV | • | • | | | | | | • | | | | | | | • | 1.107 |

Electrical Current Pulse Relay

| | Control voltage | | | | | | | Connection | | Housing | | | | | | Page | | | |
|---------------------|-----------------|------------|--|--|--|--|------------|------------|-------------|------------|----------------|-----------------|---------------------|---------------------|--------------------|------|-----------------|-----------------|-----------------|
| | DC 24V | DC 24-110V | | | | | B1, DC 24V | B2, DC 36V | B2, DC 110V | AC/DC 230V | screw terminal | spring terminal | 17,5mm Microcompact | 17,5mm Microcompact | 22,5mm Minicompact | | 35mm Varioprint | 65mm Varioprint | 90mm Varioprint |
| 1 Relay with each | | | | | | | | | | | | | | | | | | | |
| 1 N/O contact + HTV | • | | | | | | • | | | | | • | | | | • | | | 1.109 |
| | • | | | | | | • | | | | | • | | | | | | | 1.108 |
| | • | | | | | | • | | | | | • | | | | | | | 1.108 |

Interface Technology · Overview Solid State Relay



4, 5 and 6pole
Microcompact 6,2mm



5pole, pluggable
Microcompact 6,2mm



12,5mm Microcompact



11,5mm Minicompact



11,5mm Varioprint



22,5mm - 90mm
Protection

Solid State Relay - Installation width 6,2mm

| Control voltage | Switch.Elem. | | Switching capacity | | | | | | | | | | Connection | | Housing | | | | Page | |
|------------------|--------------|------------------------|--------------------|------------------------|--------------|------------|------------|---------------|--------------|---------------------|-------------|----------------|----------------|----------------|-----------------|-------|-------|------------------|------|-------|
| | 2-conductor | 3-cond., pulse switch. | DC 30V, 100mA | DC 30V, 0,5A, Wechsler | DC 30V, 1,7A | DC 30V, 3A | DC 30V, 5A | DC 48V, 100mA | DC 48V, 0,5A | DC 48V, 0,5A, 20kHz | AC 250V, 1A | AC 275V, 0,75A | AC/DC 250V, 2A | screw terminal | spring terminal | 4pole | 5pole | 5pole, pluggable | | 6pole |
| DC 24V | • | | | • | | | | | | | | | | • | • | | • | | | 1.110 |
| | • | • | | | | | • | | | | | | | • | • | | • | | | 1.111 |
| | • | | | | | | | | • | | | | | • | • | | • | | | 1.114 |
| | • | | | • | | | | | | | | | | • | • | | • | | | 1.115 |
| | • | | | | | | | | | • | | | | • | • | | • | | | 1.116 |
| | • | | | | | | | | | | • | | | • | • | | • | | | 1.117 |
| | • | | | | | | | | | | | • | | • | • | | • | | • | 1.118 |
| AC/DC 77 - 250V | • | • | | | | | | | | | | | | • | • | | • | | | 1.113 |
| AC/DC 110 - 230V | • | | • | | | | | | | | | | | • | • | | • | | | 1.112 |
| DC 24V | • | | | | | | | | | | | • | | • | • | | • | | | 1.127 |
| AC/DC 24V | • | | | | | | | | | | | | • | • | | | • | | | 1.126 |
| | • | | | | | | | | | | | | • | • | | | • | | | 1.118 |

Solid State Relay - Installation width > 6,2mm

| Control voltage | Switch.Elem. | | Switching capacity | | | | | | | | | | Connection | | Housing | | | | Page | |
|-----------------|--------------|------------------------|--------------------|------------|-------------|--------------|---------------|-------------|-------------|---------------|---------------|----------------|--------------|----------------|-----------------|---------------------|--------------------|-------------------|------|--------------------------|
| | 2-conductor | 3-cond., pulse switch. | DC 30V, 100mA | DC 30V, 5A | DC 30V, 10A | DC 60V, 1,5A | AC 250V, 1,5A | AC 280V, 5A | AC 380V, 5A | AC 400V, 3,4A | AC 400V, 3,8A | Wendeschaltung | AC 660V, 25A | screw terminal | spring terminal | 12,5mm Microcompact | 11,5mm Minicompact | 11,5mm Varioprint | | 22,5 - 90,0mm Protection |
| DC 24V | • | | | • | | | | | | | | | | • | • | • | | | | 1.119 |
| | • | | | | | | | | | | | | | • | • | • | | | | 1.121 |
| | • | | | | | | | | | | | | | • | • | • | | | | 1.122 |
| | • | | | | | | | | | | | | | • | • | • | | | | 1.123 |
| | • | | | | | | | | | | | | | • | • | • | | | | 1.124 |
| | • | | | | | | | | | | | | | • | • | • | | | | 1.125 |
| AC/DC 24V | • | | • | | | | | | | | | | | • | • | • | | | | 1.120 |
| AC/DC 230V | • | | • | | | | | | | | | | | • | • | • | | | | 1.120 |

Interface Technology - Microcompact signal converter

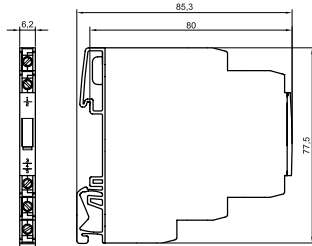
Input: 0–10 V

Output: 0–10 V / 0–20 mA / 4–20 mA

Insulation: 1.5 kV, 2-way isolation

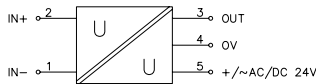


Dimensions

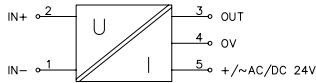


PIN assignment

750500



750501, 750502



| Description | Part-No. | Type | PU | |
|--|--|-----------------------|----------------------|-------------------|
| Screw terminal | | | | |
| Input/output | 0–10 V/0–10 V | 750500 | WAA 6-0500 | 1 |
| | 0–10 V/0–20 mA | 750501 | WAA 6-0501 | 1 |
| | 0–10 V/4–20 mA | 750502 | WAA 6-0502 | 1 |
| Spring terminal | | | | |
| Input/output | 0–10 V/0–10 V | 751500 | WAA 6-1500 | 1 |
| | 0–10 V/0–20 mA | 751501 | WAA 6-1501 | 1 |
| | 0–10 V/4–20 mA | 751502 | WAA 6-1502 | 1 |
| Input | | | | |
| Input signal | 0–10 V | | | |
| Galvanic isolation I/O | 2-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | 30 Hz at 3 dB | | | |
| Input characteristic impedance | 330 kΩ | | | |
| Output | | | | |
| Output signal | 750500/751500 | 750501/751501 | 750502/751502 | |
| | 0–10 V | 0–20 mA | 4–20 mA | |
| Max. load impedance at I-output | – | 400 Ω | – | |
| Max. load impedance at U-output | >1 kΩ | – | – | |
| Load impedance | 55 Ω | – | – | |
| Output current | max. 21 mA | – | – | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | AC/DC 24 V | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | |
| Rated current | 12.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.02 % | | | |
| Rise time (10 - 90%) | 10 ms | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | |
| Transmission frequency | <30 Hz | | | |
| Temperature coefficient | <150 ppm / K FSR | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 6.2 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.035 | | | |
| Approvals | cULus | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact signal converter

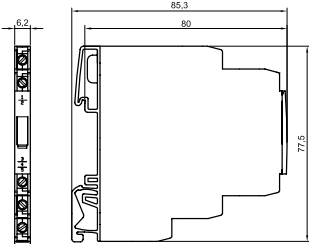
Input: 0–20 mA

Output: 0–10 V / 0–20 mA / 4–20 mA

Insulation: 1.5 kV, 2-way isolation

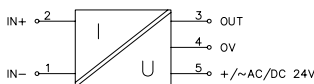


Dimensions

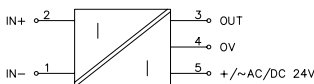


PIN assignment

750503



750504, 750505



| Description | Part-No. | Type | PU | |
|--|--|-----------------------|----------------------|----------------------|
| Screw terminal | | | | |
| Input/output | 0–20 mA/0–10 V 750503 | WAA 6-0503 | 1 | |
| | 0–20 mA/0–20 mA 750504 | WAA 6-0504 | 1 | |
| | 0–20 mA/4–20 mA 750505 | WAA 6-0505 | 1 | |
| Spring terminal | | | | |
| Input/output | 0–20 mA/0–10 V 751503 | WAA 6-1503 | 1 | |
| | 0–20 mA/0–20 mA 751504 | WAA 6-1504 | 1 | |
| | 0–20 mA/4–20 mA 751505 | WAA 6-1505 | 1 | |
| Input | | | | |
| Input signal | 0–20 mA | | | |
| Galvanic isolation I/O | 2-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | 30 Hz at 3 dB | | | |
| Input characteristic impedance | 100 Ω | | | |
| Output | | 750503/751503 | 750504/751504 | 750505/751505 |
| Output signal | 0–10 V | 0–20 mA | 4–20 mA | |
| Max. load impedance at I-output | – | 400 Ω | – | |
| Max. load impedance at U-output | >1 kΩ | – | – | |
| Load impedance | 55 Ω | – | – | |
| Output current | max. 21 mA | – | – | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | AC/DC 24 V | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | |
| Rated current | 12.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.02 % | | | |
| Rise time (10 - 90%) | 10 ms | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | |
| Transmission frequency | <30 Hz | | | |
| Temperature coefficient | <150 ppm / K FSR | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 6.2 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.035 | | | |
| Approvals | cULus | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact signal converter

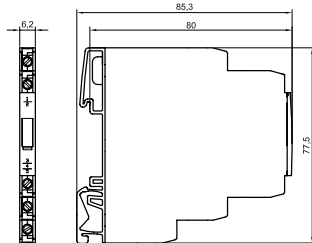
Input: 4–20 mA

Output: 0–10 V / 0–20 mA / 4–20 mA

Insulation: 1.5 kV, 2-way isolation

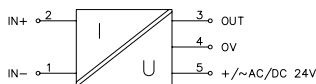


Dimensions

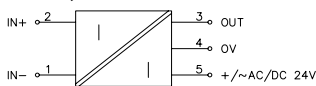


PIN assignment

750506



750507, 750508



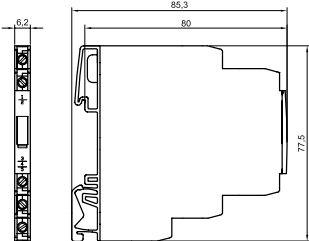
| Description | Part-No. | Type | PU | |
|--|--|----------------------|----------------------|-----|
| Screw terminal | | | | |
| Input/output | 4–20 mA/0–10 V | 750506 | WAA 6-0506 | 1 |
| | 4–20 mA/0–20 mA | 750507 | WAA 6-0507 | 1 |
| | 4–20 mA/4–20 mA | 750508 | WAA 6-0508 | 1 |
| Spring terminal | | | | |
| Input/output | 4–20 mA/0–10 V | 751506 | WAA 6-1506 | 1 |
| | 4–20 mA/0–20 mA | 751507 | WAA 6-1507 | 1 |
| | 4–20 mA/4–20 mA | 751508 | WAA 6-1508 | 1 |
| Input | | | | |
| Input signal | 4–20 mA | | | |
| Galvanic isolation I/O | 2-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | 30 Hz at 3 dB | | | |
| Input characteristic impedance | 100 Ω | | | |
| Output | | | | |
| Output signal | 750506/751506 | 750507/751507 | 750508/751508 | |
| | 0–10 V | 0–20 mA | 4–20 mA | |
| Max. load impedance at I-output | – | 400 Ω | – | |
| Max. load impedance at U-output | >1 kΩ | – | – | |
| Load impedance | 55 Ω | – | – | |
| Output current | max. 21 mA | – | – | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | AC/DC 24 V | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | |
| Rated current | 12.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.02 % | | | |
| Rise time (10 - 90%) | 10 ms | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | |
| Transmission frequency | <30 Hz | | | |
| Temperature coefficient | <150 ppm / K FSR | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | | |
| Operation temperature range | –25 °C – 60 °C | | | |
| Storage temperature range | –40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 6.2 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.035 | | | |
| Approvals | cULus | | | |
| Accessories | | | | |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact signal converter

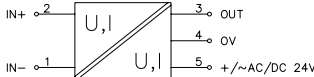
Input: 0–10 V / 0–20 mA / 4–20 mA - adjustable
Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable
Insulation: 1.5 kV, 2-way isolation



Dimensions



PIN assignment



Range adjustment

| | | S1 | | | |
|--------|--------|----|---|---|---|
| Input | Output | 1 | 2 | 3 | 4 |
| 0–20mA | 0–10V | ● | | | |
| 0–20mA | 0–20mA | ● | ● | | |
| 0–20mA | 4–20mA | ● | ● | | |
| 4–20mA | 0–10V | ● | | | ● |
| 4–20mA | 0–20mA | ● | ● | ● | |
| 4–20mA | 4–20mA | ● | ● | | |
| 0–10V | 0–10V | | ● | | |
| 0–10V | 0–20mA | | ● | ● | |
| 0–10V | 4–20mA | | ● | ● | |

| Description | Part-No. | Type | PU | |
|--|--|-----------------------|----------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 750509 | WAA 6-0509 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 751509 | WAA 6-1509 | 1 |
| Input | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | |
| Input resistance | 330 kΩ | | 100 Ω | |
| Input signal | adjustable via DIP switch S1 | | | |
| Galvanic isolation I/O | 2-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | 30 Hz at 3 dB | | | |
| Output | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | |
| Max. load impedance at I-output | – | | 400 Ω | |
| Max. load impedance at U-output | >1 kΩ | | – | |
| Load impedance | 55 Ω | | – | |
| Output current | max. 21 mA | | – | |
| Output signal | adjustable via DIP switch S1 | | | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | AC/DC 24 V | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | |
| Rated current | 12.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage AC/DC 30 V; Current input with PTC, Output short circuit-proof | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.02 % | | | |
| Rise time (10 - 90%) | 10 ms | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | |
| Transmission frequency | <30 Hz | | | |
| Temperature coefficient | <150 ppm / K FSR | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 6.2 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.035 | | | |
| Approvals | cULus | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact signal converter

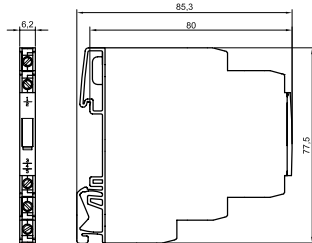
Input: 0–10 V / 0–20 mA / 4–20 mA - adjustable

Output: 0–50 / 0–100 / 0–1000 / 0–10.000 Hz - adjustable

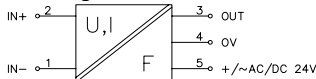
Insulation: 1.5 kV, 2-way isolation



Dimensions



PIN assignment



Range adjustment

| | | S1 | | | | | |
|---------------|--------|----|---|---|---|---|---|
| ● → Switch On | | 1 | 2 | 3 | 4 | 5 | 6 |
| Input | Output | | | | | | |
| 0 - 20mA | 50Hz | ● | | | | | |
| 0 - 20mA | 100Hz | ● | ● | | | | |
| 0 - 20mA | 1kHz | ● | ● | ● | | | |
| 0 - 20mA | 10kHz | ● | ● | ● | ● | | |
| 4 - 20mA | 50Hz | ● | | | | | |
| 4 - 20mA | 100Hz | ● | ● | | | | |
| 4 - 20mA | 1kHz | ● | ● | ● | | | |
| 4 - 20mA | 10kHz | ● | ● | ● | ● | | |
| 0 - 10V | 50Hz | | | | | ● | |
| 0 - 10V | 100Hz | | | | | ● | |
| 0 - 10V | 1kHz | | | | | ● | ● |
| 0 - 10V | 10kHz | | | | | ● | ● |

| Description | Part-No. | Type | PU |
|--|--|-----------------------|-------------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V | 750511 | WNAF 6-0511 |
| Spring terminal | | | |
| Rated voltage | AC/DC 24 V | 751511 | WNAF 6-1511 |
| Input | | | |
| | 0–10 V | 0–20 mA | 4–20 mA |
| Input resistance | 330 kΩ | | 100 Ω |
| Input signal | adjustable via DIP switch S1 | | |
| Galvanic isolation I/O | 2-way isolation | | |
| Zero /Span | Production comparison | | |
| Transmission frequency | 30 Hz at 3 dB | | |
| Output | | | |
| | 0–50 Hz | 0–100 Hz | 0–1000 Hz |
| Output signal | adjustable via DIP switch S1 | | |
| Max. load impedance at I-output | – | | |
| Max. load impedance at U-output | – | | |
| Output voltage | 20.9 V | | |
| Output current | max. 10 mA | | |
| Ripple | <5 mV _{eff} | | |
| General | | | |
| Rated voltage | AC/DC 24 V | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | |
| Rated current | 12.0 mA | | |
| Status indication | LED yellow | | |
| Input/output protection | Overvoltage AC/DC 30 V; Current input with PTC, Output short circuit-proof | | |
| Accuracy | 0.1 % FSR (23 °C) | | |
| Linearity error | 0.02 % | | |
| Rise time (10 - 90%) | frequency-dependent | | |
| Build-up time (Accuracy 1%) | frequency-dependent | | |
| Transmission frequency | <30 Hz | | |
| Temperature coefficient | <150 ppm / K FSR | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | |
| Housing material | PPE | | |
| Field installation | rail TS 35 (EN 50022) | | |
| IP rating | IP 20 | | |
| Installation position | Optional | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -40 °C – 85 °C | | |
| Dimensions (w x h x d) | 6.2 x 79.0 x 84.0 mm | | |
| Weight (kg/piece) | 0.035 | | |
| Approvals | cULus | | |
| Accessories | | | |
| | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 |
| | | | Pkg. units |

Interface Technology - Microcompact signal converter

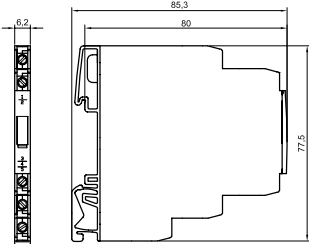
Input: 0(4)–20 mA

Output: 0(4)–20 mA

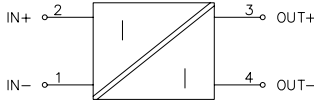
Isolation: 500 kV, 2-way isolation passive converter, 1-channel



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|--|---|-----------------------|-------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | passive | 750513 | WPAA 6-0513 | 1 |
| Spring terminal | | | | |
| Rated voltage | passive | 751513 | WPAA 6-1513 | 1 |
| Input | | | | |
| Input signal | 0(4)–20 mA | | | |
| Galvanic isolation I/O | 2-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | – | | | |
| Input characteristic impedance | – | | | |
| Output | | | | |
| Output signal | 0(4)–20 mA | | | |
| Max. load impedance at I-output | 400 Ω (R _B) | | | |
| Max. load impedance at U-output | – | | | |
| Load impedance | – | | | |
| Output current | max. 21 mA | | | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | passive | | | |
| Operation voltage range | U _E >2,7 V + 20 mA × R _B | | | |
| Input overload capability | max. 35 mA | | | |
| Status indication | No | | | |
| Input/output protection | Output short circuit protection | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.02 % | | | |
| Rise time (10 - 90%) | – | | | |
| Burden error | <0.06 % FSR / 100 Ω working resistance | | | |
| Temperature drift /K | <100 ppm / K FSR | | | |
| Temperature coefficient | 0.02 % FSR / K | | | |
| Insulation voltage input/output | 0.5 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation postition | Optional | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 6.2 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.035 | | | |
| Approvals | cULus | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact signal converter

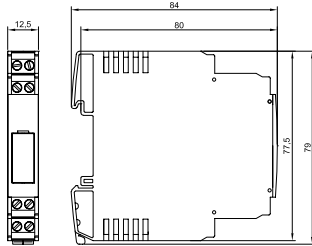
Input: 0(4)–20 mA

Output: 0(4)–20 mA

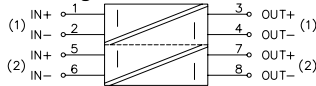
Insulation: 500 kV, 2-way isolation passive converter, 2-channel



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|---|---|-----------------------|-------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | passive | 750521 | WPAA 6-0521 | 1 |
| Spring terminal | | | | |
| Rated voltage | passive | 751521 | WPAA 6-1521 | 1 |
| Input | | | | |
| Input signal | 2 x 0(4)–20 mA | | | |
| Galvanic isolation I/O | 2-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | – | | | |
| Input characteristic impedance | – | | | |
| Output | | | | |
| Output signal | 2 x 0(4)–20 mA | | | |
| Max. load impedance at I-output | 1000 Ω (R _B) | | | |
| Max. load impedance at U-output | – | | | |
| Load impedance | – | | | |
| Output current | max. 21 mA | | | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | passive | | | |
| Operation voltage range | U _E >2,7 V + 20 mA x R _B | | | |
| Input overload capability | max. 35 mA | | | |
| Status indication | No | | | |
| Input/output protection | Output short circuit protection | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.02 % | | | |
| Rise time (10 - 90%) | – | | | |
| Burden error | <0.06 % FSR / 100 Ω working resistance | | | |
| Temperature drift /K | <175 ppm / K FSR | | | |
| Temperature coefficient | 0.02 % FSR / K | | | |
| Insulation voltage input/output | 0.5 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 12.5 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.050 | | | |
| Approvals | cULus | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 | 1 |

Interface Technology - Microcompact signal converter

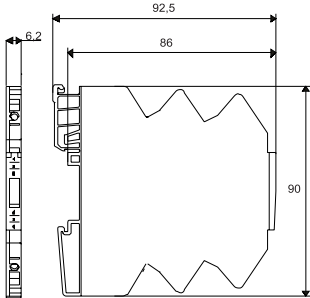
Input: 0–10 V

Output: 0–10 V / 0–20 mA / 4–20 mA

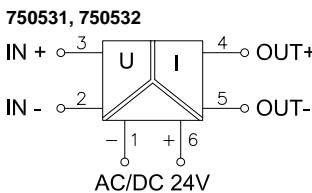
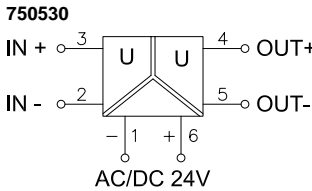
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|------------------------|----------------|--------|------------|---|
| Screw terminal | | | | |
| Input/output | 0-10 V/0-10 V | 750530 | WAA 7-0530 | 1 |
| | 0-10 V/0-20 mA | 750531 | WAA 7-0531 | 1 |
| | 0-10 V/4-20 mA | 750532 | WAA 7-0532 | 1 |
| Spring terminal | | | | |
| Input/output | 0-10 V/0-10 V | 751530 | WAA 7-1530 | 1 |
| | 0-10 V/0-20 mA | 751531 | WAA 7-1531 | 1 |
| | 0-10 V/4-20 mA | 751532 | WAA 7-1532 | 1 |

| Input | | 0–10 V | | |
|---------------------------------|--|----------------------|----------------------|----------------------|
| Input signal | 0–10 V | | | |
| Galvanic isolation I/O | 3-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | 30 Hz at 3 dB | | | |
| Input characteristic impedance | 330 kΩ | | | |
| Output | | 750530/751530 | 750531/751531 | 750532/751532 |
| Output signal | 0 – 10 V | 0–20 mA | 4–20 mA | |
| Max. load impedance at I-output | – | 400 Ω | | |
| Max. load impedance at U-output | >1 kΩ | – | | |
| Load impedance | 55 Ω | – | | |
| Output current | max. 21 mA | – | | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | AC/DC 24 V | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | |
| Rated current | 13.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.10 % | | | |
| Rise time (10 - 90%) | 10 ms | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | |
| Transmission frequency | <30 Hz | | | |
| Temperature coefficient | <150 ppm / K FSR | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | |
| Weight (kg/piece) | 0.040 | | | |
| Approvals | cULus | | | |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|--|--------|----------------|--------|-----------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact signal converter

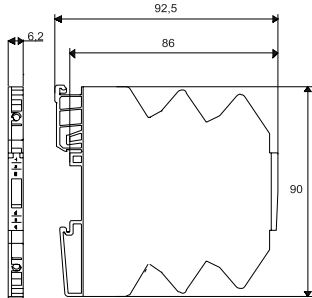
Input: 0–20 mA

Output: 0–10 V / 0–20 mA / 4–20 mA

Insulation: 1.5 kV; 3-way isolation

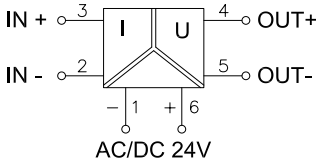


Dimensions

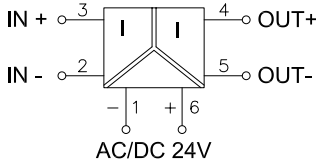


PIN assignment

750533



750534, 750535



| Description | Part-No. | Type | PU | |
|------------------------|-----------------|--------|------------|---|
| Screw terminal | | | | |
| Input/output | 0-20 mA/0-10 V | 750533 | WAA 7-0533 | 1 |
| | 0-20 mA/0-20 mA | 750534 | WAA 7-0534 | 1 |
| | 0-20 mA/4-20 mA | 750535 | WAA 7-0535 | 1 |
| Spring terminal | | | | |
| Input/output | 0-20 mA/0-10 V | 751533 | WAA 7-1533 | 1 |
| | 0-20 mA/0-20 mA | 751534 | WAA 7-1534 | 1 |
| | 0-20 mA/4-20 mA | 751535 | WAA 7-1535 | 1 |

| Input | 0–20 mA |
|--------------------------------|-----------------------|
| Input signal | 0–20 mA |
| Galvanic isolation I/O | 3-way isolation |
| Zero /Span | Production comparison |
| Transmission frequency | 30 Hz at 3 dB |
| Input characteristic impedance | 100 Ω |

| Output | 750533/751533 | 750534/751534 | 750535/751535 |
|---------------------------------|---------------|----------------------|---------------|
| Output signal | 0 – 10 V | 0–20 mA | 4–20 mA |
| Max. load impedance at I-output | – | – | 400 Ω |
| Max. load impedance at U-output | >1 kΩ | – | – |
| Load impedance | 55 Ω | – | – |
| Output current | max. 21 mA | – | – |
| Ripple | – | <5 mV _{eff} | – |

| General | |
|---------------------------------|--|
| Rated voltage | AC/DC 24 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V |
| Rated current | 13.0 mA |
| Status indication | LED yellow |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof |
| Accuracy | 0.1 % FSR (23 °C) |
| Linearity error | 0.10 % |
| Rise time (10 - 90%) | 10 ms |
| Build-up time (Accuracy 1%) | 30 ms |
| Transmission frequency | <30 Hz |
| Temperature coefficient | <150 ppm / K FSR |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Housing material | PPE |
| Field installation | rail TS 35 (EN 50022) |
| IP rating | IP 20 |
| Installation position | Optional |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm |
| Weight (kg/piece) | 0.040 |
| Approvals | cULus |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|----------------|--------|--------|--------|--------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |

| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|-----------|------------|
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact signal converter

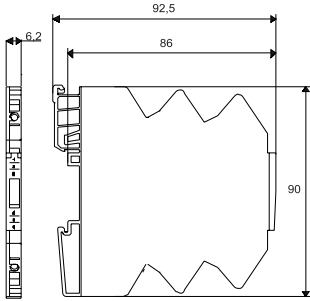
Input: 4–20 mA

Output: 0–10 V / 0–20 mA / 4–20 mA

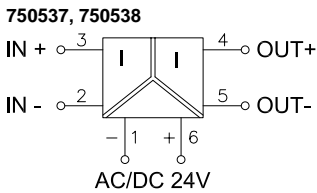
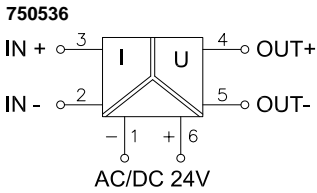
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



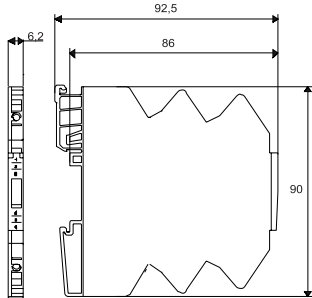
| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|----------------------|----------------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Input/output | 4-20 mA/0-10 V | 750536 | WAA 7-0536 | 1 | | | |
| | 4-20 mA/0-20 mA | 750537 | WAA 7-0537 | 1 | | | |
| | 4-20 mA/4-20 mA | 750538 | WAA 7-0538 | 1 | | | |
| Spring terminal | | | | | | | |
| Input/output | 4-20 mA/0-10 V | 751536 | WAA 7-1536 | 1 | | | |
| | 4-20 mA/0-20 mA | 751537 | WAA 7-1537 | 1 | | | |
| | 4-20 mA/4-20 mA | 751538 | WAA 7-1538 | 1 | | | |
| Input | | 4–20 mA | | | | | |
| Input signal | 4–20 mA | | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Transmission frequency | 30 Hz at 3 dB | | | | | | |
| Input characteristic impedance | 100 Ω | | | | | | |
| Output | | 750536/751536 | 750537/751537 | 750538/751538 | | | |
| Output signal | 0 – 10 V | 0–20 mA | 4–20 mA | | | | |
| Max. load impedance at I-output | – | 400 Ω | – | | | | |
| Max. load impedance at U-output | >1 kΩ | – | – | | | | |
| Load impedance | 55 Ω | – | – | | | | |
| Output current | max. 21 mA | – | – | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | | | | |
| Linearity error | 0.10 % | | | | | | |
| Rise time (10 - 90%) | 10 ms | | | | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | | | | |
| Transmission frequency | < 30 Hz | | | | | | |
| Temperature coefficient | <150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact signal converter

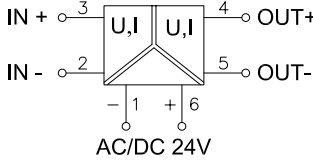
Input: 0–10 V / 0–20 mA / 4–20 mA - adjustable
Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



Range adjustment

| ● → SwitchOn | | S1 | | | | | |
|--------------|--------|----|---|---|---|---|---|
| Input | Output | 1 | 2 | 3 | 4 | 5 | 6 |
| 0-20mA | 0-10V | ● | | | | | |
| 0-20mA | 0-20mA | ● | ● | | | | |
| 0-20mA | 4-20mA | ● | | ● | | | |
| 4-20mA | 0-10V | | | | ● | | |
| 4-20mA | 0-20mA | ● | ● | | | | |
| 4-20mA | 4-20mA | ● | | ● | | | |
| 0-10V | 0-10V | | | | ● | ● | |
| 0-10V | 0-20mA | | | | ● | | ● |
| 0-10V | 4-20mA | | | | ● | | ● |

| Description | Part-No. | Type | PU | | | | |
|--|--|----------------|----------------|---------------|-----------------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750539 | WNAA 7-0539 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751539 | WNAA 7-1539 | 1 | | | |
| Input | | | | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | | | | |
| Input resistance | 330 kΩ | | 100 Ω | | | | |
| Input signal | adjustable via DIP switch S1 | | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Transmission frequency | 30 Hz at 3 dB | | | | | | |
| Output | | | | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | | | | |
| Max. load impedance at I-output | – | | 400 Ω | | | | |
| Max. load impedance at U-output | >1 kΩ | | – | | | | |
| Load impedance | 55 Ω | | – | | | | |
| Output current | max. 21 mA | | – | | | | |
| Output signal | adjustable via DIP switch S1 | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V; Current input with PTC, Output short circuit-proof | | | | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | | | | |
| Linearity error | 0.10 % | | | | | | |
| Rise time (10 - 90%) | 10 ms | | | | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | | | | |
| Transmission frequency | <30 Hz | | | | | | |
| Temperature coefficient | <150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Accessories | | | | | | | |
| | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Accessories | | | | Colour | Article number | Type | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | 1 | |

Interface Technology - Microcompact signal converter

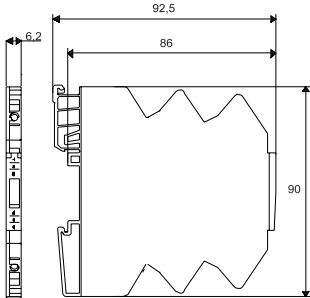
Input: 0(4)–20 mA

Output: 0(4)–20 mA

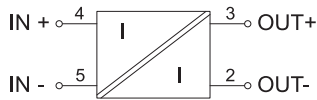
Insulation: 1.5 kV, 2-way isolation passive converter, 1-channel



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | | | | |
|---|----------------------|--|---------------|---------------|---------------|-------------------|-------------------|
| Screw terminal | | | | | | | |
| | 750526 | WPAA 7-0526 | 1 | | | | |
| Additional circuit | 750528 | WPAA 7-0528 | 1 | | | | |
| Spring terminal | | | | | | | |
| | 751526 | WPAA 7-1526 | 1 | | | | |
| Additional circuit | 751528 | WPAA 7-1528 | 1 | | | | |
| Input | 750526/751526 | 750528/751528 | | | | | |
| Input signal | 0(4)–20 mA | 4–20 mA | | | | | |
| Galvanic isolation I/O | | 2-way isolation | | | | | |
| Zero /Span | | Production comparison | | | | | |
| Transmission frequency | | – | | | | | |
| Input characteristic impedance | | – | | | | | |
| Output | 750526/751526 | 750528/751528 | | | | | |
| Output signal | 0(4)–20 mA | 4–20 mA | | | | | |
| Max. load impedance at I-output | | 1000 Ω (R _B) | | | | | |
| Burden error | | <0.06 % from measured value / 100 Ω working resistance | | | | | |
| Load impedance | | – | | | | | |
| Output current | | max. 21 mA | | | | | |
| Ripple | | <5 mV _{eff} (working resistance 100 Ω) | | | | | |
| General | 750526/751526 | 750528/751528 | | | | | |
| Max. leakage voltage | 2,8 V | 4,1 V | | | | | |
| Termination | | Screw-/spring terminal 0.14–1.5 mm ² | | | | | |
| Rated voltage | | passive | | | | | |
| Operation voltage range | | – | | | | | |
| Input overload capability | | max. 35 mA | | | | | |
| Status indication | | No | | | | | |
| Input/output protection | | Suppressor diode (33 V) | | | | | |
| Accuracy | | 0.1 % FSR (23 °C) | | | | | |
| Linearity error | | – | | | | | |
| Build-up time (Accuracy 1%) | | 6 ms (for working resistance 500 Ω and 20 mA) | | | | | |
| Temperature drift (working resistance >600R) | | <100 ppm / K FSR | | | | | |
| Temperature drift (working resistance >600R) | | <150 ppm / K FSR | | | | | |
| Insulation voltage input/output | | 1.5 kV _{eff} | | | | | |
| Housing material | | PPE | | | | | |
| Field installation | | rail TS 35 (EN 50022) | | | | | |
| IP rating | | IP 20 | | | | | |
| Installation position | | Optional | | | | | |
| Operation temperature range | | -25 °C – 60 °C | | | | | |
| Storage temperature range | | -40 °C – 85 °C | | | | | |
| Dimensions (w x h x d) | | 6.2 x 90.0 x 92.5 mm | | | | | |
| Weight (kg/piece) | | 0.040 | | | | | |
| Approvals | | cULus | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Accessories | Colour | Article number | | Type | | Pkg. units | |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 PB | | 1 | |
| Comments | | | | | | | |
| With connection: This passive isolator has a non-reactive transmission, so that the current in the input circuit is not interrupted for an output interruption. | | | | | | | |

Interface Technology - Microcompact signal converter

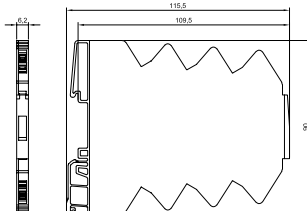
Input: 0(4)–20 mA

Output: 0(4)–20 mA

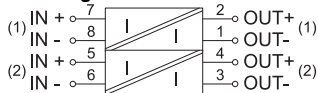
Insulation: 1.5 kV, 2-way isolation passive converter, 2-channel



Dimensions



PIN assignment



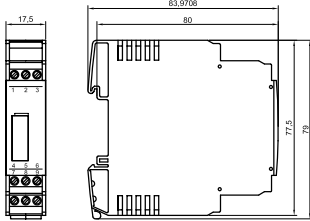
| Description | Part-No. | Type | PU | | | | |
|---|---|--|---------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| | 750527 | WPAA 7-0527 | 1 | | | | |
| Additional circuit | 750529 | WPAA 7-0529 | 1 | | | | |
| Spring terminal | | | | | | | |
| | 751527 | WPAA 7-1527 | 1 | | | | |
| Additional circuit | 751529 | WPAA 7-1529 | 1 | | | | |
| Input | | | | | | | |
| | 750527/751527 | 750529/751529 | | | | | |
| Input signal | 2 x 0(4)–20 mA | 2 x 4–20 mA | | | | | |
| Galvanic isolation I/O | | 2-way isolation | | | | | |
| Zero /Span | | Production comparison | | | | | |
| Transmission frequency | | – | | | | | |
| Input characteristic impedance | | – | | | | | |
| Output | | | | | | | |
| | 750527/751527 | 750529/751529 | | | | | |
| Output signal | 0(4)–20 mA | 2 x 4–20 mA | | | | | |
| Max. load impedance at I-output | | 1000 Ω (R _B) | | | | | |
| Burden error | | <0.06 % from measured value / 100 Ω working resistance | | | | | |
| Load impedance | | – | | | | | |
| Output current | | max. 21 mA | | | | | |
| Ripple | | <5 mV _{eff} (working resistance 100 Ω) | | | | | |
| General | | | | | | | |
| | 750527/751527 | 750529/751529 | | | | | |
| Max. leakage voltage | 2.8 V | 4.1 V | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Rated voltage | passive | | | | | | |
| Operation voltage range | – | | | | | | |
| Input overload capability | max. 35 mA | | | | | | |
| Status indication | No | | | | | | |
| Input/output protection | Suppressor diode (33 V) | | | | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | | | | |
| Linearity error | – | | | | | | |
| Build-up time (Accuracy 1%) | 6 ms (for working resistance 500 Ω and 20 mA) | | | | | | |
| Temperature drift (working resistance >600R) | <100 ppm / K FSR | | | | | | |
| Temperature drift (working resistance >600R) | <150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PA | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 115.5 mm | | | | | | |
| Weight (kg/piece) | 0.055 | | | | | | |
| Approvals | cULus | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |
| Comments | | | | | | | |
| With connection: This passive isolator has a non-reactive transmission, so that the current in the input circuit is not interrupted for an output interruption. | | | | | | | |

Interface Technology - Microcompact signal converter

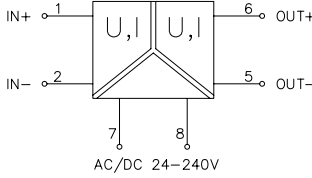
Input: 0–10 V / 0–20 mA / 4–20 mA - adjustable
Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable
Insulation: 4 kV, 3-way isolation wide range input



Dimensions



PIN assignment



Range adjustment

| S1 | | |
|----------|----------|------|
| Input | Output | Pos. |
| 0 - 20mA | 0 - 10V | 0 |
| 0 - 20mA | 0 - 20mA | 1 |
| 0 - 20mA | 4 - 20mA | 2 |
| 4 - 20mA | 0 - 10V | 3 |
| 4 - 20mA | 0 - 20mA | 4 |
| 4 - 20mA | 4 - 20mA | 5 |
| 0 - 10V | 0 - 10V | 6 |
| 0 - 10V | 0 - 20mA | 7 |
| 0 - 10V | 4 - 20mA | 8 |

| Description | Part-No. | Type | PU | |
|---|--|-----------------------|----------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24–240 V | 750510 | WNA 6-0510 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24–240 V | 751510 | WNA 6-1510 | 1 |
| Input | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | |
| Input resistance | 330 kΩ | | 100 Ω | |
| Input signal | adjustable via DIP switch S1 | | | |
| Galvanic isolation I/O | 3-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | 30 Hz at 3 dB | | | |
| Output | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | |
| Max. load impedance at I-output | – | | 400 Ω | |
| Max. load impedance at U-output | >1 kΩ | | – | |
| Load impedance | 55 Ω | | – | |
| Output current | max. 21 mA | | – | |
| Output signal | adjustable via DIP switch S1 | | | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | AC/DC 24–240 V | | | |
| Operation voltage range | DC: 16.8–264 V; AC: 19.2–264 V | | | |
| Rated current | 12.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage AC/DC 30 V; Current input with PTC, Output short circuit-proof | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.02 % | | | |
| Rise time (10 - 90%) | 10 ms | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | |
| Transmission frequency | <30 Hz | | | |
| Temperature coefficient | <150 ppm / K FSR | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.070 | | | |
| Approvals | cULus | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 6.35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 | 1 |

Interface Technology - Microcompact signal converter

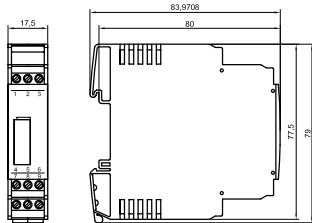
Input: 16 selectable ranges

Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable

Insulation: 4 kV, 3-way isolation wide range input

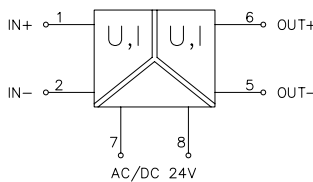


Dimensions

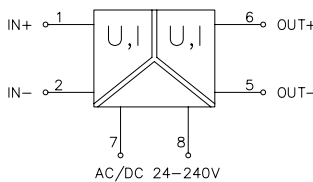


PIN assignment

AC/DC 24 V



AC/DC 24–240 V



Range adjustment

| S1 | | | |
|-----------|------|----------|------|
| Input | Pos. | Input | Pos. |
| 0 - 60mV | 0 | 0 - 20V | 8 |
| 0 - 100mV | 1 | 2 - 10V | 9 |
| 0 - 300mV | 2 | 0 - 5mA | A |
| 0 - 500mV | 3 | 0 - 10mA | B |
| 0 - 1V | 4 | 0 - 20mA | C |
| 0 - 2V | 5 | 4 - 20mA | D |
| 0 - 5V | 6 | ±5mA | E |
| 0 - 10V | 7 | ±20mA | F |

| ● → Switch On | S2 | | | |
|---------------|----|---|---|---|
| Output | 1 | 2 | 3 | 4 |
| 0-10V | ● | | | |
| 0-20mA | | ● | | |
| 4-20mA | | | ● | |

| Description | Part-No. | Type | PU |
|---|---|--|----------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V 750516 | WAA 6-0516 | 1 |
| | AC/DC 24–240 V 750517 | WAA 6-0517 | 1 |
| Spring terminal | | | |
| Rated voltage | AC/DC 24 V 751516 | WAA 6-1516 | 1 |
| | AC/DC 24–240 V 751517 | WAA 6-1517 | 1 |
| Input | | | |
| | mV, V | mA | |
| Input signal | 0–60, 0–100, 0–300, 0–500 mV 0–1, 0–2, 0–5, 0–10, 0–20, 2–10 V adjustable via DIP switch S1 | 0–5, 0–10, 0–20, 4–20, ±5, ±20 mA adjustable via DIP switch S1 | |
| Input resistance | 330kΩ | 100Ω | |
| Galvanic isolation I/O | | 3-way isolation | |
| Transmission frequency | | 30 Hz at 3 dB | |
| Output | | | |
| | 0–10 V | 0–20 mA | 4–20 mA |
| Max. load impedance at I-output | – | 400 Ω | |
| Max. load impedance at U-output | >1 kΩ | – | |
| Load impedance | 55 Ω | – | |
| Output current | max. 21 mA | – | |
| Output signal | | adjustable via DIP switch S2 | |
| Ripple | | <5 mV _{eff} | |
| General | | | |
| | 750516/751516 | 750517/751517 | |
| Rated voltage | AC/DC 24 V | AC/DC 24–240 V | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | DC: 16.8–264 V; AC: 19.2–264 V | |
| Termination | | Screw-/spring terminal: 0.14–1.5 mm ² | |
| Rated current | | 12.0 mA | |
| Status indication | | LED yellow | |
| Input/output protection | | Overvoltage AC/DC 30 V; Current input with PTC, Output short circuit-proof | |
| Accuracy | | 0.1 % FSR (23 °C) | |
| Linearity error | | 0.02 % | |
| Rise time (10 - 90%) | | 10 ms | |
| Build-up time (Accuracy 1%) | | 30 ms | |
| Transmission frequency | | <30 Hz | |
| Temperature coefficient | | <150 ppm / K FSR | |
| Insulation voltage input/output | | 4.0 kV _{eff} | |
| Housing material | | PPE | |
| Field installation | | rail TS 35 (EN 50022) | |
| IP rating | | IP 20 | |
| Installation position | | Optional | |
| Operation temperature range | | -25 °C – 60 °C | |
| Storage temperature range | | -40 °C – 85 °C | |
| Dimensions (w x h x d) | | 6.2 x 79.0 x 84.0 mm | |
| Weight (kg/piece) | | 0.070 | |
| Approvals | | cULuc | |
| Accessories | | | |
| | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| marker holder | white | 681311 | BZT 0720 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 |

Interface Technology - Microcompact signal converter

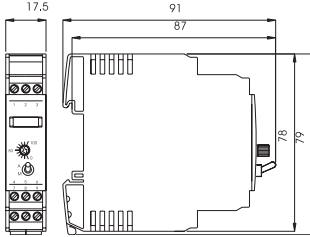
Input: 0–10 V / 0–20 mA / 4–20 mA, Manual - Automatic switch

Output: 0–10 V / 0–20 mA / 4–20 mA

Insulation: 4 kV, 2-way isolation 3-way isolation

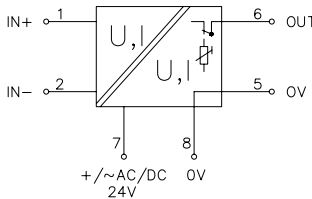


Dimensions

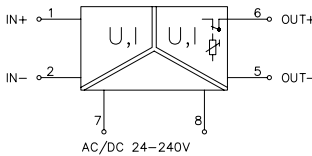


PIN assignment

AC/DC 24 V



AC/DC 24–240 V



Range adjustment

| S1 | | |
|----------|----------|------|
| Input | Output | Pos. |
| 0 - 20mA | 0 - 10V | 0 |
| 0 - 20mA | 0 - 20mA | 1 |
| 0 - 20mA | 4 - 20mA | 2 |
| 4 - 20mA | 0 - 10V | 3 |
| 4 - 20mA | 0 - 20mA | 4 |
| 4 - 20mA | 4 - 20mA | 5 |
| 0 - 10V | 0 - 10V | 6 |
| 0 - 10V | 0 - 20mA | 7 |
| 0 - 10V | 4 - 20mA | 8 |

| Description | Part-No. | Type | PU | |
|------------------------|----------------|--------|-------------|---|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 750518 | WNAA 6-0518 | 1 |
| | AC/DC 24–240 V | 750519 | WNAA 6-0519 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 751518 | WNAA 6-1518 | 1 |
| | AC/DC 24–240 V | 751519 | WNAA 6-1519 | 1 |

| Input | 0–10 V | 0–20 mA | 4–20 mA |
|------------------------|---|---------|---------|
| Input resistance | 330 kΩ | 100 Ω | |
| Input signal | adjustable via DIP switch S1 | | |
| Galvanic isolation I/O | 2-way isolation at 75x518 / 3-way isolation at 75x519 | | |
| Transmission frequency | 30 Hz at 3 dB | | |
| Zero /Span | Production comparison | | |

| Output | 0–10 V | 0–20 mA | 4–20 mA |
|---------------------------------|------------------------------|---------|---------|
| Max. load impedance at I-output | – | 400 Ω | |
| Max. load impedance at U-output | >1 kΩ | – | |
| Load impedance | 55 Ω | – | |
| Output current | max. 21 mA | – | |
| Output signal | adjustable via DIP switch S1 | | |
| Ripple | <5 mV _{eff} | | |

| General | 750518/751518 | 750519/751519 |
|---------------------------------|--|--------------------------------|
| Rated voltage | AC/DC 24 V | AC/DC 24–240 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | DC: 16.8–264 V; AC: 19.2–264 V |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | |
| Rated current | 12.0 mA | |
| Status indication | LED yellow | |
| Input/output protection | Overvoltage AC/DC 30 V; Current input with PTC, Output short circuit-proof | |
| Accuracy | 0.1 % FSR (23 °C) | |
| Linearity error | 0.02 % | |
| Rise time (10 - 90%) | 10 ms | |
| Build-up time (Accuracy 1%) | 30 ms | |
| Transmission frequency | <30 Hz | |
| Temperature coefficient | <150 ppm / K FSR | |
| Insulation voltage input/output | 4.0 kV _{eff} | |
| Housing material | PPE | |
| Field installation | rail TS 35 (EN 50022) | |
| IP rating | IP 20 | |
| Installation position | Optional | |
| Operation temperature range | -25 °C – 60 °C | |
| Storage temperature range | -40 °C – 85 °C | |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm | |
| Weight (kg/piece) | 0.070 | |
| Approvals | cULus | |

| Accessories | Colour | Article number | Type | Pkg. units |
|---|--------|----------------|-----------|------------|
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 | 1 |

Interface Technology - Microcompact signal converter

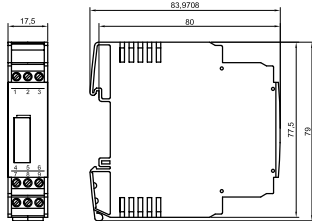
Input: 0–10 V / 0–20 mA / 4–20 mA - adjustable

Output: 0–50 / 0–100 / 0–1000 / 0–10.000 Hz - adjustable

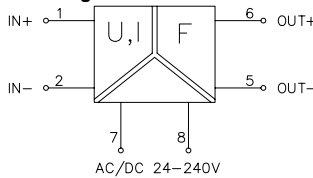
Insulation: 4 kV, 3-way isolation wide range input



Dimensions



PIN assignment



Range adjustment

| S1 | | |
|----------|-----------|------|
| Input | Output | Pos. |
| 0 - 20mA | 0 - 50Hz | 0 |
| 0 - 20mA | 0 - 100Hz | 1 |
| 0 - 20mA | 0 - 1kHz | 2 |
| 0 - 20mA | 0 - 10kHz | 3 |
| 4 - 20mA | 0 - 50Hz | 4 |
| 4 - 20mA | 0 - 100Hz | 5 |
| 4 - 20mA | 0 - 1kHz | 6 |
| 4 - 20mA | 0 - 10kHz | 7 |
| 0 - 10V | 0 - 50Hz | 8 |
| 0 - 10V | 0 - 100Hz | 9 |
| 0 - 10V | 0 - 1kHz | A |
| 0 - 10V | 0 - 10kHz | B |

| Description | Part-No. | Type | PU | |
|---|--|-----------------------|------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24–240 V | 750512 | WNAF 6-0512 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24–240 V | 751512 | WNAF 6-1512 | 1 |
| Input | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | |
| Input resistance | 330 kΩ | | 100 Ω | |
| Input signal | adjustable via DIP switch S1 | | | |
| Galvanic isolation I/O | 3-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | 30 Hz at 3 dB | | | |
| Output | | | | |
| | 0–50 Hz | 0–100 Hz | 0–1000 Hz | 0–10000 Hz |
| Output signal | adjustable via DIP switch S1 | | | |
| Max. load impedance at I-output | – | | | |
| Max. load impedance at U-output | – | | | |
| Output voltage | 15 V at 4 mA, 10 V at 7 mA | | | |
| Output current | max. 7 mA | | | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | AC/DC 24–240 V | | | |
| Operation voltage range | DC: 16.8–264 V; AC: 19.2–264 V | | | |
| Rated current | 12.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage AC/DC 30 V; Current input with PTC, Output short circuit-proof | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.02 % | | | |
| Rise time (10 - 90%) | – | | | |
| Build-up time (Accuracy 1%) | – | | | |
| Transmission frequency | <30 Hz | | | |
| Temperature coefficient | <150 ppm / K FSR | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.070 | | | |
| Approvals | cULus | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 | 1 |

Interface Technology - Microcompact signal converter

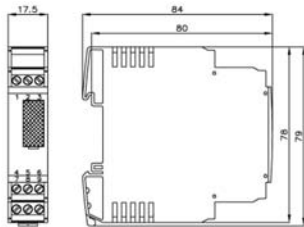
Input: Frequency AC und DC Signals, 0–28.8 kHz

Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable

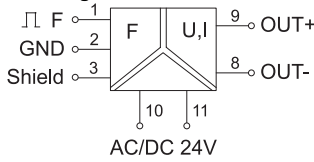
Insulation: 4 kV, 3-way isolation



Dimensions



PIN assignment



Range adjustment

| S2 → Switch On | | Range* | | Range* | | | |
|----------------|---------------------|--------|---|-----------|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | |
| 0-100Hz | ● | ● | ● | 0-5kHz | ● | ● | ● |
| 0-200Hz | ● | ● | ● | 0-6kHz | ● | ● | ● |
| 0-250Hz | ● | ● | ● | 0-8kHz | ● | ● | ● |
| 0-400Hz | ● | ● | ● | 0-10kHz | ● | ● | ● |
| 0-500Hz | ● | ● | ● | 0-12kHz | ● | ● | ● |
| 0-750Hz | ● | ● | ● | 0-16kHz | ● | ● | ● |
| 0-1kHz | ● | ● | ● | 0-20kHz | ● | ● | ● |
| 0-1.5kHz | ● | ● | ● | 0-24kHz | ● | ● | ● |
| 0-2kHz | ● | ● | ● | 0-28.8kHz | ● | ● | ● |
| 0-2.5kHz | ● | ● | ● | | | | |
| 0-3kHz | ● | ● | ● | | | | |
| 0-4kHz | ● | ● | ● | | | | |
| Hysteresis | 0.5V _{opp} | | | | | | |
| | 5V _{opp} | | | | | | |

*see instruction leaflet

| ● → Switch On | S1 |
|---------------|-------|
| Output | 1 2 3 |
| 0-10V | ● |
| 0-20mA | ● |
| 4-20mA | ● |

| Description | Part-No. | Type | PU |
|---|--|-----------------------|----------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V | 750524 | WNFA 6-0524 |
| Spring terminal | | | |
| Rated voltage | AC/DC 24 V | 751524 | WNFA 6-1524 |
| Input | | | |
| 0–28.8 kHz | | | |
| Input signal | 0–100, 0–200, 0–250, 0–400, 0–500, 0–750 Hz 0–1, 0–1.5, 0–2, 0–2.5, 0–3, 0–4, 0–5, 0–6, 0–8 kHz 0–10, 0–12, 0–16, 0–20, 0–24, 0–28.8 kHz adjustable via DIP switch S2 | | |
| Galvanic isolation I/O | 3-way isolation | | |
| Frequency signal | AC/DC 0.8–30 V | | |
| Input characteristic impedance | 50 kΩ | | |
| Hysteresis | 0,5 V _{ss} / 5 V _{ss} , adjustable via DIP switch S2 | | |
| Hysteresis | – | | |
| Pulse width | min. 10 μs | | |
| Output | | | |
| | 0–10 V | 0–20 mA | 4–20 mA |
| Max. load impedance at I-output | – | 400 Ω | – |
| Max. load impedance at U-output | >1 kΩ | – | – |
| Load impedance | 55 | – | – |
| Output current | max. 21 mA | – | – |
| Output signal | adjustable via DIP switch S1 | | |
| Output voltage | – | | |
| Ripple | <5 mV _{eff} | | |
| General | | | |
| Rated voltage | AC/DC 24 V | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | |
| Rated current | 12.0 mA | | |
| Status indication | LED yellow | | |
| Input/output protection | Overvoltage AC/DC 30 V; Output short circuit-proof | | |
| Accuracy | 0.1 % FSR (23 °C) | | |
| Linearity error | 0.02 % | | |
| Ripple | approx. 0.1%, range 2...28.8 kHz from 200 Hz | | |
| Build-up time (Accuracy 1%) | 200 ms | | |
| Transmission frequency | – | | |
| Temperature coefficient | 70 ppm / K | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Housing material | PPE | | |
| Field installation | rail TS 35 (EN 50022) | | |
| IP rating | IP 20 | | |
| Installation position | Optional | | |
| Termination | Screw-/spring terminal: 0.14–1.5 mm ² | | |
| Operation temperature range | –25 °C – 60 °C | | |
| Storage temperature range | –40 °C – 85 °C | | |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm | | |
| Weight (kg/piece) | 0.070 | | |
| Approvals | cULus in preparation | | |
| Accessories | | | |
| | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| marker holder | white | 681311 | BZT 0720 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 |

Interface Technology - Microcompact signal converter

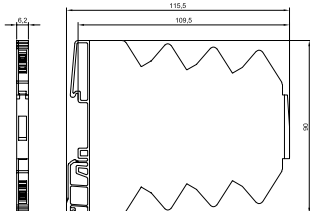
Input: 0–10V / 2–10V / 0–20 mA / 4–20mA - programmable limit value switch

Output: Semi-conductor output, limit value A, B

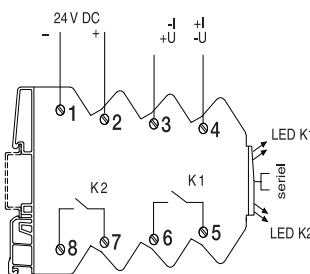
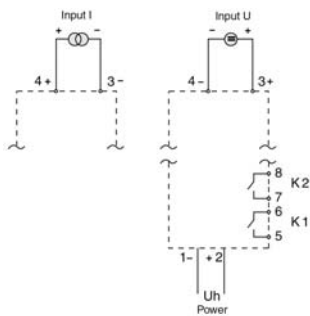
Insulation: 2.5 kV, 3-way isolation



Dimensions



PIN assignment



| Description | Part-No. | Type | PU |
|------------------------|----------|------------|----|
| Screw terminal | | | |
| Rated voltage | 750101 | WLS 7-0101 | 1 |
| Spring terminal | | | |
| Rated voltage | 751101 | WLS 7-1101 | 1 |

| Input | 0 – 10 V | 2 – 10 V | 0 – 20 mA | 4 – 20 mA |
|------------------------|---|----------|-----------|-----------|
| Input resistance | | 100 kΩ | | 100 Ω |
| Galvanic isolation I/O | 3-way isolation | | | |
| Zero /Span | – | | | |
| Transmission frequency | 100 Hz | | | |
| Input signal | 0(2)–10V, 0(4)–20mA; adjustable via Software, connection via mini-USB | | | |

| Output | |
|------------------------|------------------------------------|
| Contact type | K1,K2: Semi-conductor, N/O contact |
| Min. switching voltage | – |
| Max. switching voltage | AC/DC 30 V |
| Min. switching current | – |
| Max. switching current | AC/DC 100 mA |

| General | |
|---------------------------------|--|
| Rated voltage | DC 24 V |
| Operation voltage range | DC 20 V–30 V |
| Rated current | 30.0 mA |
| Status indication | LED green, blinks for alarm |
| Adaptive control constraint | 0 – 110 % |
| Hysteresis | 0 – 90 % |
| Delay ON/OFF | 0 – 999 s |
| Operating mode | Limit value, window, tendency +, tendency -, tendency +/-, inversion |
| Linearity error | 0.1 % FSR (23 °C) |
| Transmission frequency | – |
| Temperature error | < 30 ppm / °C |
| Insulation voltage input/output | 2.5 kV _{eff} |
| Housing material | PPE |
| Field installation | rail TS 35 (EN 50022) |
| IP rating | IP 20 |
| Installation position | Optional |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² |
| Operation temperature range | 0 °C – 60 °C |
| Storage temperature range | -40 °C – 70 °C |
| Dimensions (w x h x d) | 6.2 x 90.0 x 115.5 mm |
| Weight (kg/piece) | 0.120 |
| Approvals | cULus in preparation |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|----------------|--------|--------|--------|--------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |

| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|-------------|------------|
| Programming tool | | 750891 | WPZB 7-0891 | 1 |
| Marker holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A-4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Comments
 Application: The limit switch is used for the limit value monitoring of standardized signals. These are used as threshold switch, monitoring relay, for temperature monitoring, pressure monitoring, overflow monitoring, dry-running monitoring, motor protection monitoring, speed monitoring, etc.

Description
 Function: The process factors to be monitored can be present as direct current signal or DC voltage signal. After internal processing of the input signal, this is compared with the digitally set limit value and in the case of exceeding or falling below of the measurement signal, a transistor output is activated. Two switching functions can be realized via the transistor outputs each with one output. Each switching function can be parameterized with individual hysteresis from 0.1...90%, an On/Off switching delay from 0...999 seconds, an inverse operation as well as with a safety switching state for signal disturbances.

Interface Technology - Microcompact signal converter

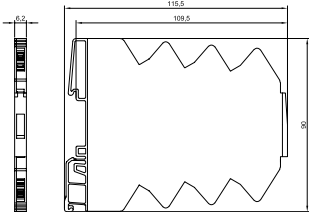
Input: AC/DC 0–1 A / 0–5 A

Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable

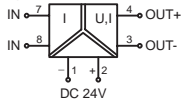
Insulation: 2.5 kV, 3-way isolation



Dimensions



PIN assignment



Range adjustment

| ● → Switch On | | S1 |
|---------------|--------|---------|
| Input | Output | 1 2 3 4 |
| 0-1A | 0-10V | |
| 0-1A | 0-20mA | ● |
| 0-1A | 4-20mA | ● |

| ● → Switch On | | S1 |
|---------------|--------|---------|
| Input | Output | 1 2 3 4 |
| 0-5A | 0-10V | |
| 0-5A | 0-20mA | ● |
| 0-5A | 4-20mA | ● |

| Description | Part-No. | Type | PU | | | | |
|--|---|--------------------------------|----------------------|----------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | DC 24 V, 0–1 A | 750540 | WAA 7-0540 | 1 | | | |
| | DC 24 V, 0–5 A | 750541 | WAA 7-0541 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | DC 24 V, 0–1 A | 751540 | WAA 7-1540 | 1 | | | |
| | DC 24 V, 0–5 A | 751541 | WAA 7-1541 | 1 | | | |
| Input | | 750540/751540 | 750541/751541 | | | | |
| Input signal | AC/DC 0 – 1 A, ± 1 A, true RMS | AC/DC 0 – 5 A, ± 5 A, true RMS | | | | | |
| Input characteristic impedance | typ. 0.2 Ω | typ. 0.1 Ω | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Line frequency | 6 kHz | | | | | | |
| Strip width | 6 kHz | | | | | | |
| Output | | 0–10 V | 0–20 mA | 4–20 mA | | | |
| Max. load impedance at I-output | – | 400 Ω | | | | | |
| Max. load impedance at U-output | >1 kΩ | – | | | | | |
| Load impedance | 55 Ω | – | | | | | |
| Output current | max. 21 mA | – | | | | | |
| Output signal | adjustable via DIP switch S1 | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow | | | | | | |
| Input/output protection | – | | | | | | |
| Accuracy | 0.5 % FSR (23 °C) | | | | | | |
| Linearity error | 0.10 %, FSR (23°C) | | | | | | |
| Rise time (10 - 90%) | – | | | | | | |
| Build-up time (Accuracy 1%) | 150 ms | | | | | | |
| Transmission frequency | – | | | | | | |
| Temperature coefficient | <150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 2.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 115.5 mm | | | | | | |
| Weight (kg/piece) | 0.055 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 PB | | | 1 |

Interface Technology - Microcompact signal converter

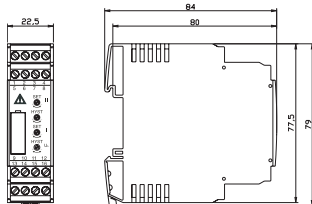
AC/DC - Current - Monitoring Module

Input: DC 0–1 A; 0–5 A; ± 1 A; ± 5 A / AC 0–1 A; 0–5 A

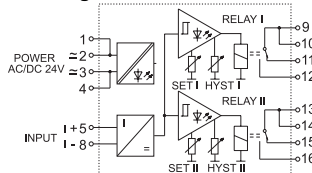
Output: 2 Relays each with 1directional contact; insulation: 4 kV, 3-way isolation



Dimensions

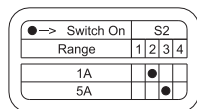


PIN assignment



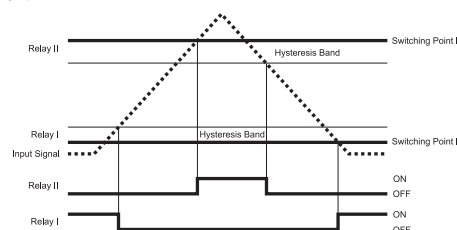
Range adjustment

| S1 | OFF | ON |
|----|-----------------|---------------------------------|
| 1 | Relay I MAX | Relay I MIN |
| 2 | Relay I normal | Relay I inverse |
| 3 | Relay II MAX | Relay II MIN |
| 4 | Relay II normal | Relay II inverse |
| 5 | - | Relay II power supply detection |
| 6 | Unipolar input | Bipolar input |
| 7 | AC input | DC input |
| 8 | DC input | AC input |



| Description | Part-No. | Type | PU |
|---|--|----------------|-----------------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V | 750100 | CCR 6-0100 AC/DC 24 V |
| Input | | | |
| Input signal | DC 0–1 A; 0–5 A; ± 1 A; ± 5 A; / AC 0–1 A; 0–5 A, sinusoidal | | |
| Input signal | adjustable via DIP switch S2 | | |
| Galvanic isolation I/O | 3-way isolation | | |
| Line frequency | 10 – 500 Hz | | |
| Input characteristic impedance | <0.01 Ω | | |
| Input overload capability | 2 x I rated continuous, 100 A for 1 s | | |
| Output | | | |
| Output | 2 relay outputs | | |
| Contact type | 1 directional contact each | | |
| Min. switching voltage | AC/DC 17 V | | |
| Max. switching voltage | AC/DC 250 V | | |
| Min. switching current | AC/DC 5 mA | | |
| Max. switching current | AC/DC 6 A | | |
| Max. switching capacity | 1500 VA | | |
| Rise time | 20 ms | | |
| Switching thresholds | 0–100 % independently adjustable (12-turn potentiometer) | | |
| Hysteresis | 0–60 % vom Endwert einstellbar (12-Gang Potenziometer) | | |
| Control mode, Relay | adjustable via DIP switch S1 | | |
| General | | | |
| Rated voltage | AC/DC 24 V | | |
| Operation voltage range | AC/CD 20.4–27.6 V | | |
| Rated current | – mA | | |
| Status indication | 1 yellow LED per switching contact | | |
| Input/output protection | – | | |
| Accuracy | 0.2 % FSR (23 °C) | | |
| Temperature coefficient | <150 ppm / K FSR | | |
| Insulation voltage | Input/Output: 4.0 kV / 2.5 kV between the relays | | |
| Housing material | PPE | | |
| Field installation | rail TS 35 (EN 50022) | | |
| IP rating | IP 20 | | |
| Installation position | Optional | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | |
| Operation temperature range | –20 °C – 60 °C | | |
| Storage temperature range | –40 °C – 85 °C | | |
| Dimensions (w x h x d) | 22.5 x 84.0 x 79.0 mm | | |
| Weight (kg/piece) | 0.090 | | |
| Approvals | cULus | | |
| Accessories | | | |
| | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| marker holder | white | 681311 | BZT 0720 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 |

Action chart



Parameterisation: relay I MIN, relay II MAX, relays I und II NO contacts (normal)

Interface Technology - Minicompact signal converter

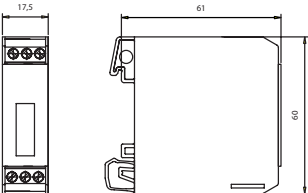
DC - Current - Monitoring Module

Input: DC 24 V / 0–2.5 A

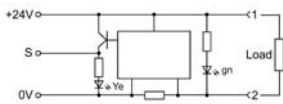
Output: DC 24 V, signal output: Transistor



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|--|---|-----------------------|---------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 730866 | LVUE 4-0866 DC 24 V | |
| Input | | | | |
| | | DC 0–2.5 A | | |
| Input signal | 0–2.5 A | | | |
| Galvanic isolation I/O | No | | | |
| Input characteristic impedance | <0.13 Ω | | | |
| Voltage control | DC 18–30V, LED green | | | |
| Output | | | | |
| Output voltage | DC 24 V (Ub)–0.4 V | | | |
| Output current | 2.5 A continuous, 10 A for 1 s | | | |
| Output voltage | DC 24 V (Ub)–0.5 V | | | |
| Output current | max. 50 mA | | | |
| Switching-element notify output | Transistor | | | |
| Rise time | 20 ms | | | |
| Switching thresholds | $I_M = 250 \text{ mA} / U_b = 18 \text{ V}$ | | | |
| General | | | | |
| Rated voltage | DC 24 V | | | |
| Operation voltage range | DC 18–30 V | | | |
| Rated current | – mA | | | |
| Status indication | LED green: Voltage good, LED yellow: signal output on | | | |
| Input/output protection | varistor | | | |
| Accuracy | ±10 % | | | |
| Temperature coefficient | – | | | |
| Insulation voltage input/output | – kV_{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | | |
| Operation temperature range | –20 °C – 60 °C | | | |
| Storage temperature range | –40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 17.5 x 60.0 x 67.0 mm | | | |
| Weight (kg/piece) | 0.075 | | | |
| Approvals | – | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 9x20 mm | white | 681315 | BZT 0920 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 9 x 20 mm (Sheet with 270 labels) | | 681032 | LEB 0924 | 1 |

Interface Technology - Microcompact signal converter

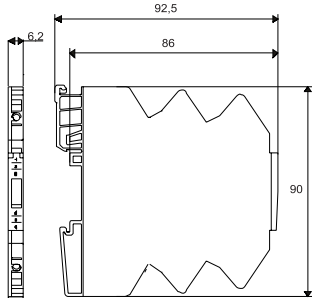
Output: 0–500 mV

Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable

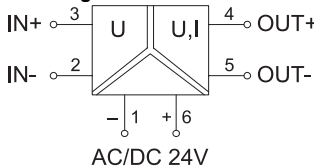
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



Range adjustment

| ● → Switch On | S1 | | | | | | |
|---------------|--------|---|---|---|---|---|---|
| Range | Output | 1 | 2 | 3 | 4 | 5 | 6 |
| 0 – 500mV | 0-10V | | | | | | |
| 0 – 500mV | 0-20mA | | ● | | | | |
| 0 – 500mV | 4-20mA | | | ● | | | |

| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|----------------|---------------|---------------|-------------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750550 | WAA 7-0550 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751550 | WAA 7-1550 | | | | |
| Input | | | | | | | |
| Input signal | 0–500 mV | | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Transmission frequency | 30 Hz at 3 dB | | | | | | |
| Input characteristic impedance | 330 kΩ | | | | | | |
| Output | | | | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | | | | |
| Max. load impedance at I-output | – | 400 Ω | – | | | | |
| Max. load impedance at U-output | >1 kΩ | – | – | | | | |
| Load impedance | 55 Ω | – | – | | | | |
| Output current | max. 21 mA | – | – | | | | |
| Output signal | adjustable via DIP switch S1 | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, PTC fuse, Output short circuit-proof | | | | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | | | | |
| Linearity error | 0.10 % | | | | | | |
| Rise time (10 - 90%) | 10 ms | | | | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | | | | |
| Transmission frequency | <30 Hz | | | | | | |
| Temperature coefficient | <150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | Pkg. units | |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | 1 | |

Interface Technology - Microcompact signal converter

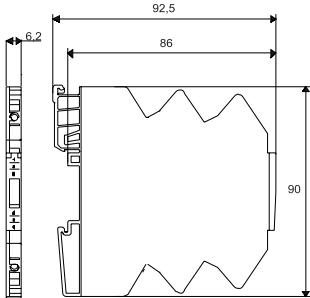
Input: 0–60 mV

Output: 0–10 V

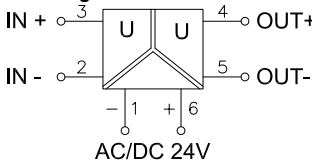
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|---------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750901 | WAA 7-0901 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751901 | WAA 7-1901 | 1 | | | |
| Input | | | | | | | |
| Input signal | 0–60 mV | | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Transmission frequency | 30 Hz at 3 dB | | | | | | |
| Input characteristic impedance | 330 kΩ | | | | | | |
| Output | | | | | | | |
| Output signal | 0 – 10 V | | | | | | |
| Max. load impedance at I-output | – | | | | | | |
| Max. load impedance at U-output | >1 kΩ | | | | | | |
| Load impedance | 55 Ω | | | | | | |
| Output current | max. 21 mA | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, PTC fuse, Output short circuit-proof | | | | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | | | | |
| Linearity error | 0.10 % | | | | | | |
| Rise time (10 - 90%) | 10 ms | | | | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | | | | |
| Transmission frequency | <30 Hz | | | | | | |
| Temperature coefficient | <150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact signal converter

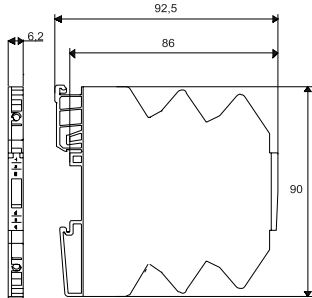
Input: 4–20 mA

Output: 0–5 V

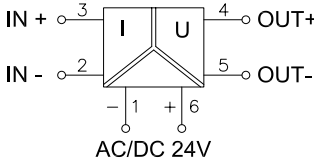
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|---------------|---------------|---------------|-------------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750906 | WAA 7-0906 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751906 | WAA 7-1906 | | | | |
| Input | | | | | | | |
| Input signal | 4–20 mA | | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Transmission frequency | 30 Hz at 3 dB | | | | | | |
| Input characteristic impedance | 100 Ω | | | | | | |
| Output | | | | | | | |
| Output signal | 0–5 V | | | | | | |
| Max. load impedance at I-output | – | | | | | | |
| Max. load impedance at U-output | >1 kΩ | | | | | | |
| Load impedance | 55 Ω | | | | | | |
| Output current | max. 21 mA | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V; Current input with PTC, Output short circuit-proof | | | | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | | | | |
| Linearity error | 0.10 % | | | | | | |
| Rise time (10 - 90%) | 10 ms | | | | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | | | | |
| Transmission frequency | <30 Hz | | | | | | |
| Temperature coefficient | <150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | Pkg. units | |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | 1 | |

Interface Technology - Microcompact signal converter

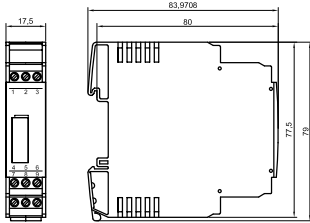
Input: 0–1 V / 0–10 V / 4–20 mA - adjustable

Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable

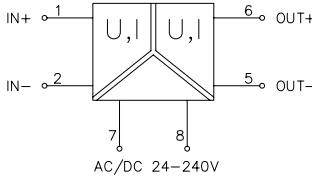
Insulation: 4 kV, 3-way isolation with wide range input



Dimensions



PIN assignment



Range adjustment

| S1 | | |
|----------|----------|------|
| Input | Output | Pos. |
| 0 - 1V | 0 - 10V | 0 |
| 0 - 1V | 0 - 20mA | 1 |
| 0 - 1V | 4 - 20mA | 2 |
| 4 - 20mA | 0 - 10V | 3 |
| 4 - 20mA | 0 - 20mA | 4 |
| 4 - 20mA | 4 - 20mA | 5 |
| 0 - 10V | 0 - 10V | 6 |
| 0 - 10V | 0 - 20mA | 7 |
| 0 - 10V | 4 - 20mA | 8 |

| Description | Part-No. | Type | PU | |
|---|--|-----------------------|----------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24–240 V | 750910 | WNA 6-0910 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24–240 V | 751910 | WNA 6-1910 | 1 |
| Input | | | | |
| | 0–1 V | 0–10 V | 4–20 mA | |
| Input resistance | 330 kΩ | | 100 Ω | |
| Input signal | adjustable via DIP switch S1 | | | |
| Galvanic isolation I/O | 3-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | 30 Hz at 3 dB | | | |
| Output | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | |
| Max. load impedance at I-output | – | 400 Ω | | |
| Max. load impedance at U-output | >1 kΩ | – | | |
| Load impedance | 55 Ω | – | | |
| Output current | max. 21 mA | – | | |
| Output signal | adjustable via DIP switch S1 | | | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | AC/DC 24–240 V | | | |
| Operation voltage range | DC: 16.8–264 V; AC: 19.2–264 V | | | |
| Rated current | 12.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage AC/DC 30 V; Current input with PTC, Output short circuit-proof | | | |
| Accuracy | 0.1 % FSR (23 °C) | | | |
| Linearity error | 0.02 % | | | |
| Rise time (10 - 90%) | 10 ms | | | |
| Build-up time (Accuracy 1%) | 30 | | | |
| Transmission frequency | <30 Hz | | | |
| Temperature coefficient | <150 ppm / K FSR | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 6.2 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.070 | | | |
| Approvals | cULus | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 6.35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 | 1 |

Interface Technology - Microcompact signal converter

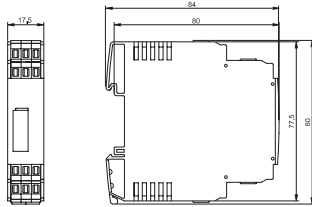
Input: 0–200 V

Output: 0–10 V

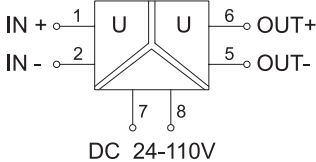
Insulation: 4 kV, 3-way isolation with wide range input



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|---------------------------------|--|--------|------------|---|
| Spring terminal | | | | |
| Rated voltage | DC 24–110 V | 751854 | WAA 6-1854 | 1 |
| Screw terminal | | | | |
| Rated voltage | DC 24–110 V | 750854 | WAA 6-0854 | 1 |
| Input | | | | |
| Input signal | 0–200 V | | | |
| Galvanic isolation I/O | 3-way isolation | | | |
| Zero /Span | Production comparison | | | |
| Transmission frequency | 30 Hz at 3 dB | | | |
| Input characteristic impedance | 330 kΩ | | | |
| Output | | | | |
| Output signal | 0 – 10 V | | | |
| Max. load impedance at I-output | – | | | |
| Max. load impedance at U-output | >1 kΩ | | | |
| Load impedance | 55 Ω | | | |
| Output current | – | | | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | DC 24–110 V | | | |
| Operation voltage range | DC: 16.8–143 V | | | |
| Rated current | 12.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage Varistor, PTC fuse, Output short circuit-proof | | | |
| Accuracy | 0.3 % FSR (23 °C) | | | |
| Linearity error | 0.10 % | | | |
| Rise time (10 - 90%) | 10 ms | | | |
| Build-up time (Accuracy 1%) | 30 ms | | | |
| Transmission frequency | <30 Hz | | | |
| Temperature coefficient | <150 ppm / K FSR | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | |
| Operation temperature range | -40°C – +70°C (+85°C 10 min) | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 6.2 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.070 | | | |
| Approvals | cULus, EN 50155 | | | |

| Accessories | Colour | Article number | Type | Pkg. units |
|---|--------|----------------|-----------|------------|
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 | 1 |

Interface Technology - Microcompact signal converter

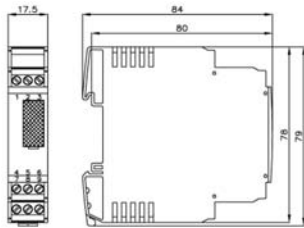
Input: Full bridge, bridge voltage DC 5 V or DC 10 V

Output: 0–10 V / 0–20 mA / 4–20 mA

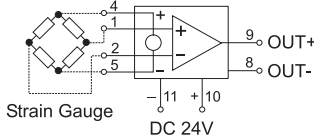
Insulation: without



Dimensions



PIN assignment



Range adjustment

| S2 | ● -> Switch On | 1 | 2 | 3 | 4 |
|--------------------------------|----------------|---|---|---|---|
| Excitation | 10V max. 50mA | ● | | | |
| | 5V max. 25mA | | ● | | |
| Output | -10...+10V | | ● | | |
| | 0-20mA | | | ● | |
| Bandwidth (Range: 30 (1)mV) | 6 (1.5)Hz | | | ● | |
| | 25 (2)Hz | | | | ● |

| Range | On |
|-------|------|
| +1mV | S1-8 |
| +2mV | S1-7 |
| +4mV | S1-6 |
| +8mV | S1-5 |
| +16mV | S1-4 |
| +32mV | S1-3 |
| +64mV | S1-2 |

| Zero | On |
|-------|------|
| +1mV | S1-1 |
| +2mV | S2-8 |
| +4mV | S2-7 |
| +8mV | S2-6 |
| -15mV | S2-5 |

| Description | Part-No. | Type | PU |
|------------------------|----------|--------|-------------|
| Screw terminal | | | |
| Rated voltage | DC 24 V | 750522 | WBRA 6-0522 |
| Spring terminal | | | |
| Rated voltage | DC 24 V | 751522 | WBRA 6-1522 |

| | | | |
|-------------------------------|--|--|--|
| Jumper | | | |
| Jumper flow | DC 5 V, DC 10 V | | |
| Temperature drift /K | 35 ppm / K | | |
| Difference from desired value | 1.00% | | |
| Jumper power | 25 mA (5 V); 50 mA (10 V) | | |
| Zero point | ±15 mV, adjustable via DIP switch S1, S2 | | |
| Measuring range | ±127 mV, adjustable via DIP switch S1 | | |

| | | | |
|-------------------------------|--------------|--|--|
| Measurement input | | | |
| Input current | 1 nA (typ.) | | |
| Noise 0.1-10 Hz, pp RTI, typ. | 1 µV | | |
| Error range-changing switch | 0,6 % | | |
| Common-mode range | -7 V to +7 V | | |

| | | | | |
|---------------------------------|------------------------------|-----------------|----------------|----------------|
| Output | | ± 0–10 V | 0–20 mA | 4–20 mA |
| Max. load impedance at I-output | – | – | 400 Ω | – |
| Max. load impedance at U-output | >1 kΩ | – | – | – |
| Load impedance | 50 Ω | – | – | – |
| Output current | max. 5 mA | – | – | – |
| Output signal | adjustable via DIP switch S2 | | | |
| Ripple | <5 mV _{eff} | | | |

| | | | |
|---------------------------------------|--|--|--|
| General | | | |
| Rated voltage | DC 24 V | | |
| Operation voltage range | 20.4–28.8 V | | |
| Rated current | 20.0 mA | | |
| Status indication | LED yellow | | |
| Input/output protection | Overvoltage DC 30 V, Output short circuit-proof | | |
| Accuracy | 0.1 % FSR (23 °C) | | |
| Linearity error | 0.02 % | | |
| Transmission frequency | Range 30 mV: 25 Hz / 6 Hz; range 1 mV: 2 Hz / 1.5 Hz - switchable | | |
| Build-up time (Accuracy 1%) | 25 Hz : 50 ms; 6 Hz : 200 ms, 2 Hz : 600 ms; 1.5 Hz : 800 ms | | |
| Influence operation voltage | 0,005 % / V | | |
| Stability amplification (ranges>8 mV) | Temperature: 70 ppm/K, weathering: 1 year 800 ppm, 10 years 2500 ppm | | |
| Stability zero point | Temperature: 1 µV / K, weathering: 1 year = 10 µV, 10 years = 40 µV | | |
| Insulation voltage input/output | – kV _{eff} | | |
| Housing material | PPE | | |
| Field installation | rail TS 35 (EN 50022) | | |
| IP rating | IP 20 | | |
| Installation postition | Optional | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm | | |
| Weight (kg/piece) | 0.070 | | |
| Approvals | cULus in preparation | | |

| Accessories | Colour | Article number | Type | Pkg. units |
|---|--------|----------------|-----------|------------|
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB 0615 | 1 |

Interface Technology - Microcompact signal converter

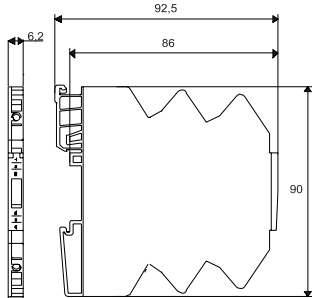
Continuous voltage source, 1-channel

Input: DC 24 V

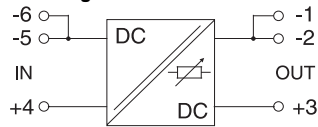
Output: DC 10 V



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|------------------------|---------------|---------------|-------------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | DC 24 V | 762184 | CV 7-2184 DC 24 V/10 V | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | DC 24 V | 762084 | CV 7-2084 DC 24 V/10 V | 1 | | | |
| Input | | | | | | | |
| Input signal | - | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Zero /Span | - | | | | | | |
| Transmission frequency | - | | | | | | |
| Input resistance | - | | | | | | |
| Output | | | | | | | |
| DC 10 V | | | | | | | |
| Output signal | can be set via potentiometer | | | | | | |
| Output voltage, setting range | 9-11 V | | | | | | |
| Output current | 100 mA | | | | | | |
| Current limitation | 100 mA | | | | | | |
| Regulating accuracy | 1 % | | | | | | |
| Ripple | <10 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8-30 V | | | | | | |
| Rated current | 30.0 mA | | | | | | |
| Status indication | LED yellow | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Power | 1 W | | | | | | |
| Hold up time | <10 ms | | | | | | |
| Efficiency | 85 % | | | | | | |
| Insulation voltage input/output | 0.1 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14-1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C - 60 °C | | | | | | |
| Storage temperature range | -40 °C - 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | Pkg. units | |
| Marker holder 4 x 11 mm | white | 681313 | | BZT 0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB-A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | 1 | |

Interface Technology - Microcompact Temperature Converter

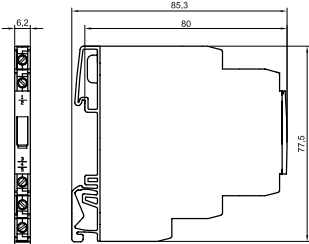
Input: PT100, 2-wire - with fix adjustable temperature range from - 0°C... + 150°C

Output: 4–20 mA

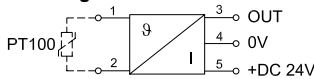
Insulation: without



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|--|--|----------------|------------|------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 750802 | WPT 6-0802 | 1 |
| Spring terminal | | | | |
| Rated voltage | DC 24 V | 751802 | WPT 6-1802 | 1 |
| Input | | | | |
| PT 100 | | | | |
| Measurement input | PT100, 2-wire, offset correction | | | |
| Galvanic isolation I/O | without | | | |
| Temperature range | 0 – 150 °C | | | |
| Transmission frequency | 30 Hz | | | |
| Input resistance | 1 MΩ | | | |
| Sensor current | 0.5 mA | | | |
| Zero /Span | Production comparison | | | |
| Output | | | | |
| 4–20 mA | | | | |
| Output signal | 4–20 mA | | | |
| Max. load impedance at I-output | 400 Ω | | | |
| Max. load impedance at U-output | – | | | |
| Load impedance | – Ω | | | |
| Output current | – | | | |
| Ripple | <5 mV _{eff} | | | |
| General | | | | |
| Rated voltage | DC 24 V | | | |
| Operation voltage range | DC: 16.8–30 V | | | |
| Rated current | 6.0 mA | | | |
| Status indication | LED yellow | | | |
| Input/output protection | Overvoltage DC 30 V | | | |
| Accuracy | <0.5 % FSR | | | |
| Linearity error | 0.1 % FSR | | | |
| Rise time (10 - 90%) | 8 ms | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | |
| Error coefficient of measuring line | 2.7 K/Ω | | | |
| Temperature coefficient | 150 ppm / K FSR | | | |
| Insulation voltage input/output | – kV _{eff} | | | |
| Housing material | PPE | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| IP rating | IP 20 | | | |
| Installation position | Optional | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 6.2 x 78.3 x 86.2 mm | | | |
| Weight (kg/piece) | 0.030 | | | |
| Approvals | cULus | | | |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Marker holder 4 x 11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact Temperature Converter

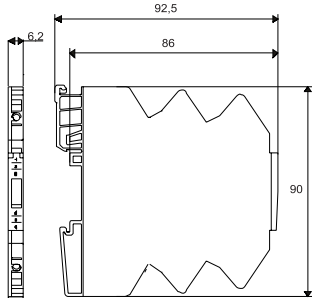
Input: PT100, 2-wire - with fix adjustable temperature range from - 0°C... + 150°C

Output: 4–20 mA

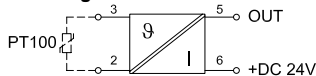
Insulation: 1.5 kV; 2-way isolation



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|---------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | looped supply | 750806 | WPT 7-0806 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | looped supply | 751806 | WPT 7-1806 | 1 | | | |
| Input | | | | | | | |
| PT 100 | | | | | | | |
| Measurement input | PT100, 2-wire, offset correction | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Temperature range | 0 – 150 °C | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 1 MΩ | | | | | | |
| Sensor current | 0.5 mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| 4–20 mA | | | | | | | |
| Output signal | 4–20 mA | | | | | | |
| Max. load impedance at I-output | Rs= Load resistance, Us= Input terminal voltage at the power supply | | | | | | |
| Max. load impedance at U-output | – | | | | | | |
| Load impedance | – Ω | | | | | | |
| Output current | – | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | looped supply | | | | | | |
| Operation voltage range | Us _{min} = 14 V + 20 mA x RS; Us _{max} = 28 V + 20 mA x RS | | | | | | |
| Rated current | – mA | | | | | | |
| Status indication | – | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.3 % FSR | | | | | | |
| Linearity error | 0.1 % FSR | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 19 ms | | | | | | |
| Error coefficient of measuring line | 2.7 K/Ω | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.030 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Marker holder 4 x 11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB-A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

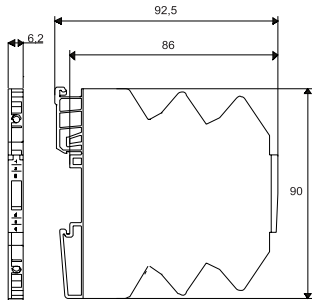
Input: PT100, 2-wire - with adjustable temperature range from - 200°C... + 200°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

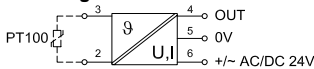
Insulation: 1.5 kV; 2-way isolation



Dimensions



PIN assignment



Range adjustment

| | | S1 | | | | | |
|-----------|--------|----|---|---|---|---|---|
| Range | Output | 1 | 2 | 3 | 4 | 5 | 6 |
| -50–150°C | 0-10V | | | | | | |
| -50–150°C | 0-20mA | ● | | | | | |
| -50–150°C | 4-20mA | ● | | | | | |
| 0–100°C | 0-10V | ● | ● | | | | |
| 0–100°C | 0-20mA | ● | ● | | | | |
| 0–100°C | 4-20mA | ● | ● | | | | |
| 0–200°C | 0-10V | ● | ● | ● | | | |
| 0–200°C | 0-20mA | ● | ● | ● | | | |
| 0–200°C | 4-20mA | ● | ● | ● | | | |

| Description | Part-No. | Type | PU |
|------------------------|------------|--------|------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V | 750803 | WPT 7-0803 |
| Spring terminal | | | |
| Rated voltage | AC/DC 24 V | 751803 | WPT 7-1803 |

| Input | | PT 100 | |
|------------------------|--|--------|--|
| Measurement input | PT100, 2-wire, offset correction | | |
| Galvanic isolation I/O | 2-way isolation | | |
| Temperature range | - 50–150 °C / 0–100 °C / 0–200 °C—adjustable via DIP switch S1 | | |
| Transmission frequency | 10 Hz | | |
| Input resistance | 1 MΩ | | |
| Sensor current | 0.5 mA | | |
| Zero /Span | Production comparison | | |

| Output | 0–10 V | 0–20 mA | 4–20 mA |
|---------------------------------|------------------------------|---------|---------|
| Max. load impedance at I-output | – | – | 400 Ω |
| Max. load impedance at U-output | >1 kΩ | – | – |
| Load impedance | 55 Ω | – | – |
| Output current | max. 21 mA | – | – |
| Output signal | adjustable via DIP switch S1 | | |
| Ripple | <5 mV _{eff} | | |

| General | |
|-------------------------------------|--|
| Rated voltage | AC/DC 24 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V |
| Rated current | 8.0 mA |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof |
| Accuracy | 0.3 % FSR |
| Linearity error | 0.1 % FSR |
| Rise time (10 - 90%) | 30 ms |
| Build-up time (Accuracy 1%) | 60 ms |
| Error coefficient of measuring line | 2.7 K/Ω |
| Temperature coefficient | 150 ppm / K FSR |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Housing material | PPE |
| Field installation | rail TS 35 (EN 50022) |
| IP rating | IP 20 |
| Installation position | Optional |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm |
| Weight (kg/piece) | 0.040 |
| Approvals | cULus |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|----------------|--------|--------|--------|--------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |

| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|-----------|------------|
| Marker holder 4 x 11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact Temperature Converter

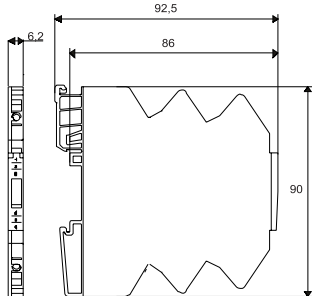
Input: PT100, 2-wire - with freely selectable temperature range from - 200°C... + 800°C

Output: 0–10 V / 4–20 mA

Insulation: 1.5 kV; 2-way isolation

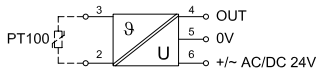


Dimensions

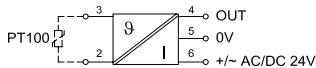


PIN assignment

750805



750804



| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|---------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750805 | WPT 7-0805 | 1 | | | |
| | AC/DC 24 V | 750804 | WPT 7-0804 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751805 | WPT 7-1805 | 1 | | | |
| | AC/DC 24 V | 751804 | WPT 7-1804 | 1 | | | |
| Input | | | | | | | |
| PT 100 | | | | | | | |
| Measurement input | PT100, 2-wire, offset correction | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Temperature range | Settings according to customer order. -200–800 °C. Please specify temperature range when ordering. Please observe: Smallest temperature span 50°C, largest temperature span 500°C. | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 1 MΩ | | | | | | |
| Sensor current | 0.5 mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | 750805/751805 | 750804/751804 | | | | | |
| Output signal | 0 – 10 V | 4–20 mA | | | | | |
| Max. load impedance at I-output | – | 400 Ω | | | | | |
| Max. load impedance at U-output | >1 kΩ | – | | | | | |
| Load impedance | 55 Ω | – | | | | | |
| Output current | max. 21 mA | – | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 8.0 mA | | | | | | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.3 % FSR | | | | | | |
| Linearity error | 0.1 % FSR | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | 2.7 K/Ω | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Marker holder 4 x 11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB-A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

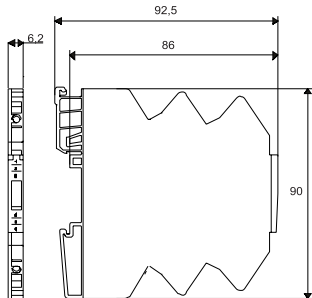
Input: PT100, 2-wire - with adjustable temperature range from - 50°C... + 200°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

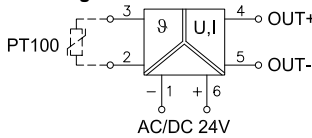
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



Range adjustment

| ● → Switch On | | S1 | | | | | |
|---------------|--------|----|---|---|---|---|---|
| Range | Output | 1 | 2 | 3 | 4 | 5 | 6 |
| -50 – 150°C | 0-10V | | | | | | |
| -50 – 150°C | 0-20mA | ● | | | | | |
| -50 – 150°C | 4-20mA | | ● | | | | |
| 0 – 100°C | 0-10V | | ● | | | | |
| 0 – 100°C | 0-20mA | | | ● | | | |
| 0 – 100°C | 4-20mA | | ● | | | | |
| 0 – 200°C | 0-10V | | | ● | | | |
| 0 – 200°C | 0-20mA | | ● | | | | |
| 0 – 200°C | 4-20mA | | | | ● | | |

| Description | Part-No. | Type | PU | |
|------------------------|------------|--------|------------|---|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 750809 | WPT 7-0809 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 751809 | WPT 7-1809 | 1 |

| Input | | PT 100 | |
|------------------------|--|--------|--|
| Measurement input | PT100, 2-wire, offset correction | | |
| Galvanic isolation I/O | 3-way isolation | | |
| Temperature range | - 50–150 °C / 0–100 °C / 0–200 °C - adjustable via DIP switch S1 | | |
| Transmission frequency | 10 Hz | | |
| Input resistance | 1 MΩ | | |
| Sensor current | 0.5 mA | | |
| Zero /Span | Production comparison | | |

| Output | 0–10 V | 0–20 mA | 4–20 mA |
|---------------------------------|------------------------------|---------|---------|
| Max. load impedance at I-output | – | | 400 Ω |
| Max. load impedance at U-output | >1 kΩ | | – |
| Load impedance | 55 Ω | | – |
| Output current | max. 21 mA | | – |
| Output signal | adjustable via DIP switch S1 | | |
| Ripple | <5 mV _{eff} | | |

| General | |
|-------------------------------------|--|
| Rated voltage | AC/DC 24 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V |
| Rated current | 13.0 mA |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof |
| Accuracy | 0.3 % FSR |
| Linearity error | 0.1 % FSR |
| Rise time (10 - 90%) | 30 ms |
| Build-up time (Accuracy 1%) | 60 ms |
| Error coefficient of measuring line | 2.7 K/Ω |
| Temperature coefficient | 150 ppm / K FSR |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Housing material | PPE |
| Field installation | rail TS 35 (EN 50022) |
| IP rating | IP 20 |
| Installation position | Optional |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm |
| Weight (kg/piece) | 0.040 |
| Approvals | cULus |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|----------------|--------|--------|--------|--------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |

| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|-----------|------------|
| Marker holder 4 x 11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact Temperature Converter

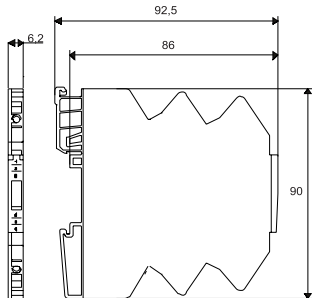
Input: PT100, 2-wire - with freely selectable temperature range from - 200°C... + 800°C

Output: 0–10 V / 4–20 mA

Insulation: 1.5 kV; 3-way isolation

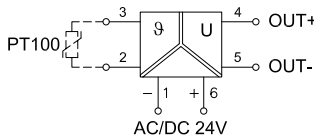


Dimensions

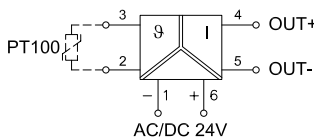


PIN assignment

750807



750808



| Description | Part-No. | Type | PU | |
|------------------------|------------|--------|------------|---|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 750807 | WPT 7-0807 | 1 |
| | AC/DC 24 V | 750808 | WPT 7-0808 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 751807 | WPT 7-1807 | 1 |
| | AC/DC 24 V | 751808 | WPT 7-1808 | 1 |

| Input | | PT 100 |
|------------------------|---|--------|
| Measurement input | PT100, 2-wire, offset correction | |
| Galvanic isolation I/O | 3-way isolation | |
| Temperature range | Settings according to customer order. -200 °C - 800 °C. Please specify temperature range when ordering. Please observe: Smallest temperature span 50°C, largest temperature span 500°C. | |

| | | |
|---------------------------------|-----------------------|----------------------|
| Transmission frequency | 10 Hz | |
| Input resistance | 1 MΩ | |
| Sensor current | 0.5 mA | |
| Zero /Span | Production comparison | |
| Output | 750807/751807 | 750808/751808 |
| Output signal | 0 – 10 V | 4–20 mA |
| Max. load impedance at I-output | – | 400 Ω |
| Max. load impedance at U-output | >1 kΩ | – |
| Load impedance | 55 Ω | – |
| Output current | max. 21 mA | – |
| Ripple | <5 mV _{eff} | |

| General | |
|-------------------------------------|--|
| Rated voltage | AC/DC 24 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V |
| Rated current | 8.0 mA |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof |
| Accuracy | 0.3 % FSR |
| Linearity error | 0.1 % FSR |
| Rise time (10 - 90%) | 30 ms |
| Build-up time (Accuracy 1%) | 60 ms |
| Error coefficient of measuring line | 2.7 K/Ω |
| Temperature coefficient | 150 ppm / K FSR |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Housing material | PPE |
| Field installation | rail TS 35 (EN 50022) |
| IP rating | IP 20 |
| Installation position | Optional |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm |
| Weight (kg/piece) | 0.040 |
| Approvals | cULus |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|--|--------|----------------|--------|-----------|------------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | Pkg. units | | |
| Marker holder 4 x 11 mm | white | 681313 | | BZT 0411 | 100 | | |
| Isolation plate | | 760809 | | TP 7-0809 | 5 | | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB-A4 | 1 | | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | 1 | | |

Interface Technology - Microcompact Temperature Converter

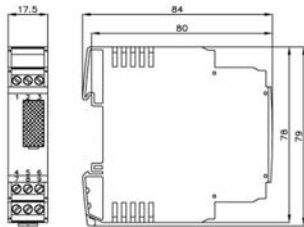
Input: PT100, 2-wire - with adjustable temperature range from - 50°C... + 400°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

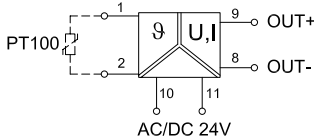
Insulation: 4.0 kV; 3-way isolation



Dimensions



PIN assignment



Range adjustment

| S1 | |
|-------------|------|
| Range | Pos. |
| -50 – 50°C | 0 |
| -50 – 100°C | 1 |
| -50 – 150°C | 2 |
| 0 – 100°C | 3 |
| 0 – 150°C | 4 |
| 0 – 200°C | 5 |
| 0 – 300°C | 6 |
| 0 – 400°C | 7 |

| Output | S2 |
|--------|----|
| 0-10V | ● |
| 0-20mA | ● |
| 4-20mA | ● |

| Description | Part-No. | Type | PU |
|------------------------|------------|--------|------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V | 750810 | WPT 7-0810 |
| Spring terminal | | | |
| Rated voltage | AC/DC 24 V | 751810 | WPT 7-1810 |

| Input | |
|------------------------|--|
| Measurement input | PT100, 2-wire, offset correction |
| Galvanic isolation I/O | 3-way disconnection |
| Temperature range | -50–50 °C / -50–100 °C / -50–150 °C / 0–100 °C / 0–150 °C / 0–200 °C / 0–300 °C / 0–400 °C - adjustable via rotary switch S1 |
| Transmission frequency | 10 Hz |
| Input resistance | 1 MΩ |
| Sensor current | 0.5 mA |
| Zero /Span | Production comparison |

| Output | | 0–10 V | 0–20 mA | 4–20 mA |
|---------------------------------|--|------------------------------|---------|---------|
| Max. load impedance at I-output | | – | | 400 Ω |
| Max. load impedance at U-output | | >1 kΩ | | – |
| Load impedance | | 55 Ω | | – |
| Output current | | max. 21 mA | | – |
| Output signal | | adjustable via DIP switch S2 | | |
| Ripple | | <5 mV _{eff} | | |

| General | |
|-------------------------------------|--|
| Rated voltage | AC/DC 24 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V |
| Rated current | 8.0 mA |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof |
| Accuracy | 0.3 % FSR |
| Linearity error | 0.1 % FSR |
| Rise time (10 - 90%) | 30 ms |
| Build-up time (Accuracy 1%) | 60 ms |
| Error coefficient of measuring line | 2.7 K/Ω |
| Temperature coefficient | 150 ppm / K FSR |
| Insulation voltage input/output | 4.0 kV _{eff} |
| Housing material | PPE |
| Field installation | rail TS 35 (EN 50022) |
| IP rating | IP 20 |
| Installation postition | Optional |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm |
| Weight (kg/piece) | 0.060 |
| Approvals | cULus |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III |

| Accessories | Colour | Article number | Type | Pkg. units |
|---|--------|----------------|-----------|------------|
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 | 1 |

Interface Technology - Microcompact Temperature Converter

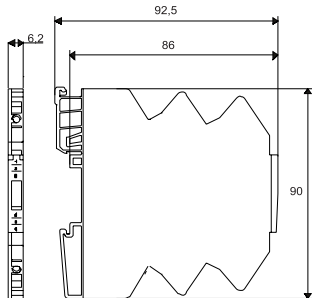
Input: PT100, 2-wire - with adjustable temperature range from - 50°C... +400°C

Output: 0–50 Hz / 0–100 Hz / 0–1000 Hz / 0–10.000 Hz

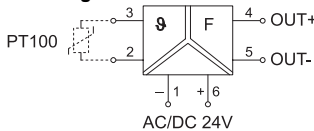
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



Range adjustment

| ● → Switch On | | S1 | | | | | |
|---------------|-----------|----|---|---|---|---|---|
| Range | Output | 1 | 2 | 3 | 4 | 5 | 6 |
| -50 - 150°C | 0 - 50Hz | | | | | | |
| -50 - 150°C | 0 - 100Hz | | | | | | |
| -50 - 150°C | 0 - 1kHz | | | | | | |
| -50 - 150°C | 0 - 10kHz | | | | | | |
| 0 - 200°C | 0 - 50Hz | | | | | | |
| 0 - 200°C | 0 - 100Hz | | | | | | |
| 0 - 200°C | 0 - 1kHz | | | | | | |
| 0 - 200°C | 0 - 10kHz | | | | | | |
| 0 - 400°C | 0 - 50Hz | | | | | | |
| 0 - 400°C | 0 - 100Hz | | | | | | |
| 0 - 400°C | 0 - 1kHz | | | | | | |
| 0 - 400°C | 0 - 10kHz | | | | | | |

| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|---------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750811 | WPT 7-0811 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751811 | WPT 7-1811 | | | | |
| Input | | | | | | | |
| Measurement input | 2-wire, Offset correction | | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Temperature range | -50–150°C / 0–200°C / 0–400°C, adjustable via DIP switch S1 | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 240 kΩ | | | | | | |
| Sensor current | 0.5 mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| Output signal | 0–50 Hz / 0–100 Hz / 0–1000 Hz / 0–10.000 Hz - adjustable via DIP switch S1 | | | | | | |
| Max. load impedance at I-output | – | | | | | | |
| Max. load impedance at U-output | ≥2500 Ω, Ausgangspegel ca. 10 V | | | | | | |
| Load impedance | 55 Ω | | | | | | |
| Output current | 21 mA | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.3 % FSR | | | | | | |
| Linearity error | 0.1 % FSR | | | | | | |
| Rise time (10 - 90%) | frequency-dependent | | | | | | |
| Build-up time (Accuracy 1%) | frequency-dependent | | | | | | |
| Transmission frequency | <30 Hz | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w × h × d) | 6.2 × 90.0 × 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

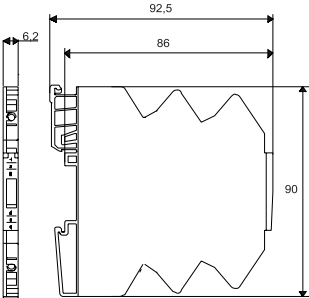
Input: PT100, 3-wire - with adjustable temperature range from - 50°C... + 200°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

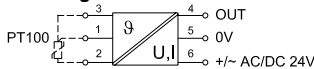
Insulation: 1.5 kV; 2-way isolation



Dimensions



PIN assignment



Range adjustment

| ● → Switch On | | S1 | | | | | |
|---------------|--------|----|---|---|---|---|---|
| Range | Output | 1 | 2 | 3 | 4 | 5 | 6 |
| -50 – 150°C | 0-10V | | | | | | |
| -50 – 150°C | 0-20mA | ● | | | | | |
| -50 – 150°C | 4-20mA | | ● | | | | |
| 0 – 100°C | 0-10V | | ● | | | | |
| 0 – 100°C | 0-20mA | | | ● | | | |
| 0 – 100°C | 4-20mA | | ● | ● | | | |
| 0 – 200°C | 0-10V | | | ● | ● | | |
| 0 – 200°C | 0-20mA | | | ● | ● | | |
| 0 – 200°C | 4-20mA | | | | | ● | |

| Description | Part-No. | Type | PU |
|------------------------|------------|--------|------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V | 750819 | WPT 7-0819 |
| Spring terminal | | | |
| Rated voltage | AC/DC 24 V | 751819 | WPT 7-1819 |

| Input | | PT 100 | |
|------------------------|--|--------|--|
| Measurement input | PT100, 3-wire | | |
| Galvanic isolation I/O | 2-way isolation | | |
| Temperature range | - 50–150 °C / 0–100 °C / 0–200 °C - adjustable via DIP switch S1 | | |
| Transmission frequency | 10 Hz | | |
| Input resistance | 240 kΩ | | |
| Sensor current | 0.5 mA | | |
| Zero /Span | Production comparison | | |

| Output | 0–10 V | 0–20 mA | 4–20 mA |
|---------------------------------|------------------------------|---------|---------|
| Max. load impedance at I-output | – | – | 400 Ω |
| Max. load impedance at U-output | >1 kΩ | – | – |
| Load impedance | 55 Ω | – | – |
| Output current | max. 21 mA | – | – |
| Output signal | adjustable via DIP switch S1 | | |
| Ripple | <5 mV _{eff} | | |

| General | |
|-------------------------------------|--|
| Rated voltage | AC/DC 24 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V |
| Rated current | 8.0 mA |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof |
| Accuracy | 0.3 % FSR |
| Linearity error | 0.1 % FSR |
| Rise time (10 - 90%) | 30 ms |
| Build-up time (Accuracy 1%) | 60 ms |
| Error coefficient of measuring line | 0.1 K + 0.1 %/Ω |
| Temperature coefficient | 150 ppm / K FSR |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Housing material | PPE |
| Field installation | rail TS 35 (EN 50022) |
| IP rating | IP 20 |
| Installation position | Optional |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm |
| Weight (kg/piece) | 0.040 |
| Approvals | cULus |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|----------------|--------|--------|--------|--------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |

| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|-----------|------------|
| Marker holder 4 x 11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact Temperature Converter

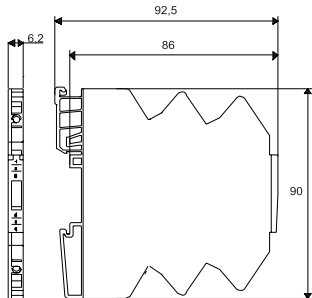
Input: PT100, 2-wire - with adjustable temperature range from - 0°C... + 200°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

Insulation: 1.5 kV; 2-way isolation



Dimensions



PIN assignment



Range adjustment

| | | S1 | | | | | |
|-----------|--------|----|---|---|---|---|---|
| Range | Output | 1 | 2 | 3 | 4 | 5 | 6 |
| 0 - 50°C | 0-10V | | | | | | |
| 0 - 50°C | 0-20mA | ● | | | | | |
| 0 - 50°C | 4-20mA | | ● | | | | |
| 0 - 100°C | 0-10V | ● | ● | | | | |
| 0 - 100°C | 0-20mA | | ● | | | | |
| 0 - 100°C | 4-20mA | ● | ● | | | | |
| 0 - 200°C | 0-10V | ● | ● | ● | | | |
| 0 - 200°C | 0-20mA | ● | ● | ● | | | |
| 0 - 200°C | 4-20mA | | | | ● | | |

| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|----------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750855 | WPT 7-0855 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751855 | WPT 7-1855 | | | | |
| Input | | | | | | | |
| PT 100 | | | | | | | |
| Measurement input | PT100, 3-wire | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Temperature range | 0–50°C / 0–100°C / 0–200°C - adjustable via DIP switch S1 | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 240 kΩ | | | | | | |
| Sensor current | 0.5 mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | | | | |
| Max. load impedance at I-output | – | 400 Ω | – | | | | |
| Max. load impedance at U-output | >1 kΩ | – | – | | | | |
| Load impedance | 55 Ω | – | – | | | | |
| Output current | max. 21 mA | – | – | | | | |
| Output signal | adjustable via DIP switch S1 | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 8.0 mA | | | | | | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.3 % FSR | | | | | | |
| Linearity error | 0.1 % FSR | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | 0.1 K + 0.1 %/Ω | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | UL, CSA | | | | | | |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Marker holder 4 x 11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB-A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

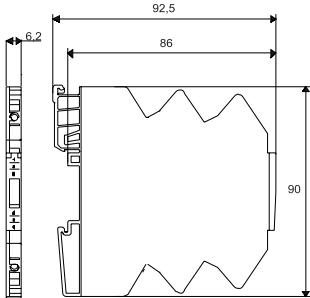
Input: PT100, 3-wire - with freely selectable temperature range from - 200°C... + 800°C

Output: 0–10 V / 4–20 mA

Insulation: 1.5 kV; 2-way isolation

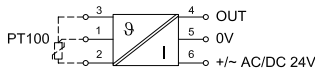


Dimensions

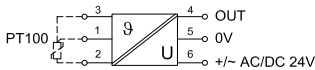


PIN assignment

750820



750821



| Description | Part-No. | Type | PU | | | | |
|--|---|-----------------------|----------------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750820 | WPT 7-0820 | 1 | | | |
| | AC/DC 24 V | 750821 | WPT 7-0821 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751820 | WPT 7-1820 | 1 | | | |
| | AC/DC 24 V | 751821 | WPT 7-1821 | 1 | | | |
| Input | | | | | | | |
| PT 100 | | | | | | | |
| Measurement input | PT100, 3-wire | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Temperature range | Settings according to customer order. -200 °C - 800 °C. Please specify temperature range when ordering. Please observe: Smallest temperature span 50°C, largest temperature span 500°C. | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 240 kΩ | | | | | | |
| Sensor current | 0.5 mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | 750820/751820 | 750821/751821 | | | | |
| Output signal | 4–20 mA | 0 – 10 V | | | | | |
| Max. load impedance at I-output | 400 Ω | – | | | | | |
| Max. load impedance at U-output | – | >1 kΩ | | | | | |
| Load impedance | – | 55 Ω | | | | | |
| Output current | – | max. 21 mA | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 8.0 mA | | | | | | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.3 % FSR | | | | | | |
| Linearity error | 0.1 % FSR | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | 0.1 K + 0.1 %/Ω | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Marker holder 4 x 11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB-A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

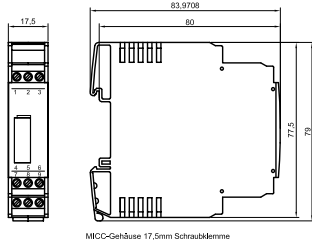
Input: PT100, 3-wire - with adjustable temperature range from - 50°C... + 400°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

Insulation: 4.0 kV; 3-way isolation

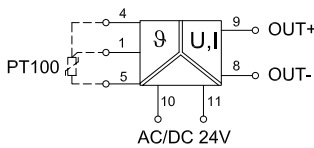


Dimensions

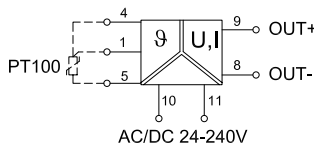


PIN assignment

750816



750817



Range adjustment

| S1 | |
|-------------|------|
| Range | Pos. |
| -50 – 50°C | 0 |
| -50 – 100°C | 1 |
| -50 – 150°C | 2 |
| 0 – 100°C | 3 |
| 0 – 150°C | 4 |
| 0 – 200°C | 5 |
| 0 – 300°C | 6 |
| 0 – 400°C | 7 |

| ● → Switch On | S2 | | | |
|---------------|----|---|---|---|
| Output | 1 | 2 | 3 | 4 |
| 0-10V | ● | | | |
| 0-20mA | | ● | | |
| 4-20mA | | | ● | |

| Description | Part-No. | Type | PU | |
|------------------------|----------------|--------|------------|---|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 750816 | WPT 6-0816 | 1 |
| | AC/DC 24–240 V | 750817 | WPT 6-0817 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 751816 | WPT 6-1816 | 1 |
| | AC/DC 24–240 V | 751817 | WPT 6-1817 | 1 |

| Input | | PT 100 | |
|------------------------|--|---------------|--|
| Measurement input | PT100, 3-wire | | |
| Galvanic isolation I/O | 3-way isolation | | |
| Temperature range | -50–50°C / -50–100°C / -50–150°C / 0–100°C / 0–150°C / 0–200°C / 0–300°C / 0–400°C - adjustable via rotary switch S1 | | |

| | |
|------------------------|-----------------------|
| Transmission frequency | 10 Hz |
| Input resistance | 240 kΩ |
| Sensor current | 0.5 mA |
| Zero /Span | Production comparison |

| Output | 0–10 V | 0–20 mA | 4–20 mA |
|---------------------------------|------------------------------|---------|---------|
| Max. load impedance at I-output | – | 400 Ω | – |
| Max. load impedance at U-output | >1 kΩ | – | – |
| Load impedance | 55 Ω | – | – |
| Output current | max. 21 mA | – | – |
| Output signal | adjustable via DIP switch S2 | | |
| Ripple | <5 mV _{eff} | | |

| General | 750816/751816 | 750817/751817 |
|-------------------------------------|--|-------------------------------|
| Rated voltage | AC/DC 24 V | AC/DC 24–240 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | DC: 16.8–264 V; AC: 19.2–264V |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | |
| Rated current | 10.0 mA | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | |
| Accuracy | 0.3 % FSR | |
| Linearity error | 0.1 % FSR | |
| Rise time (10 - 90%) | 30 ms | |
| Build-up time (Accuracy 1%) | 60 ms | |
| Error coefficient of measuring line | 0.1 K + 0.1 %/Ω | |
| Temperature coefficient | 150 ppm / K FSR | |
| Insulation voltage input/output | 4.0 kV _{eff} | |
| Housing material | PPE | |
| Field installation | rail TS 35 (EN 50022) | |
| IP rating | IP 20 | |
| Installation position | Optional | |
| Operation temperature range | -25 °C – 60 °C | |
| Storage temperature range | -40 °C – 85 °C | |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm | |
| Weight (kg/piece) | 0.070 | |
| Approvals | cULus | |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III | |

| Accessories | Colour | Article number | Type | Pkg. units |
|---|--------|----------------|-----------|------------|
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 | 1 |

Interface Technology - Microcompact Temperature Converter

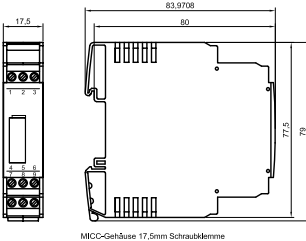
Input: PT100, 2/4-wire - with adjustable temperature range from - 50°C... + 400°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

Insulation: 4.0 kV; 3-way isolation

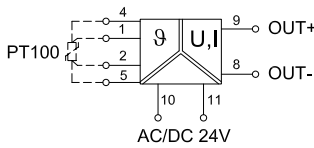


Dimensions

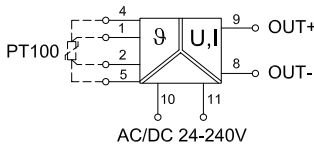


PIN assignment

750815



750818



Range adjustment

| S1 | |
|-------------|------|
| Range | Pos. |
| -50 – 50°C | 0 |
| -50 – 100°C | 1 |
| -50 – 150°C | 2 |
| 0 – 100°C | 3 |
| 0 – 150°C | 4 |
| 0 – 200°C | 5 |
| 0 – 300°C | 6 |
| 0 – 400°C | 7 |

| ● → Switch On | S2 |
|---------------|---------|
| Output | 1 2 3 4 |
| 0-10V | ● |
| 0-20mA | ● |
| 4-20mA | ● |

| Description | Part-No. | Type | PU | |
|------------------------|----------------|--------|------------|---|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 750815 | WPT 6-0815 | 1 |
| | AC/DC 24–240 V | 750818 | WPT 6-0818 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 751815 | WPT 6-1815 | 1 |
| | AC/DC 24–240 V | 751818 | WPT 6-1818 | 1 |

| Input | | PT 100 | |
|------------------------|--|---------------|--|
| Measurement input | PT100, 2/4-wire | | |
| Galvanic isolation I/O | 3-way isolation | | |
| Temperature range | -50–50°C / -50–100°C / -50–150°C / 0–100°C / 0–150°C / 0–200°C / 0–300°C / 0–400°C - adjustable via rotary switch S1 | | |

| | |
|------------------------|-----------------------|
| Transmission frequency | 10 Hz |
| Input resistance | 240 kΩ |
| Sensor current | 0.5 mA |
| Zero /Span | Production comparison |

| Output | 0–10 V | 0–20 mA | 4–20 mA |
|---------------------------------|------------------------------|---------|---------|
| Max. load impedance at I-output | – | 400 Ω | – |
| Max. load impedance at U-output | >1 kΩ | – | – |
| Load impedance | 55 Ω | – | – |
| Output current | max. 21 mA | – | – |
| Output signal | adjustable via DIP switch S2 | | |
| Ripple | <5 mV _{eff} | | |

| General | 750815/751815 | 750818/751818 |
|-------------------------------------|--|-------------------------------|
| Rated voltage | AC/DC 24 V | AC/DC 24–240 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | DC: 16.8–264 V; AC: 19.2–264V |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | |
| Rated current | 10.0 mA | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | |
| Accuracy | 0.3 % FSR | |
| Linearity error | 0.1 % FSR | |
| Rise time (10 - 90%) | 30 ms | |
| Build-up time (Accuracy 1%) | 60 ms | |
| Error coefficient of measuring line | 0.1 K + 0.1 %/Ω | |
| Temperature coefficient | 150 ppm / K FSR | |
| Insulation voltage input/output | 4.0 kV _{eff} | |
| Housing material | PPE | |
| Field installation | rail TS 35 (EN 50022) | |
| IP rating | IP 20 | |
| Installation position | Optional | |
| Operation temperature range | -25 °C – 60 °C | |
| Storage temperature range | -40 °C – 85 °C | |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm | |
| Weight (kg/piece) | 0.070 | |
| Approvals | cULus | |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III | |

| Accessories | Colour | Article number | Type | Pkg. units |
|---|--------|----------------|-----------|------------|
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 | 1 |

Interface Technology - Microcompact Temperature Converter

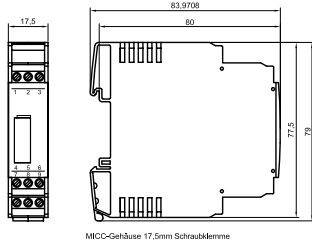
Input: PT100, 2/4-wire - with adjustable temperature range from - 100°C... + 400°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

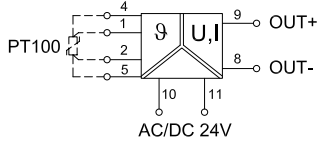
Insulation: 4.0 kV; 3-way isolation



Dimensions



PIN assignment



Range adjustment

| S1 | |
|--------------|------|
| Range | Pos. |
| -100 – 100°C | 0 |
| -100 – 150°C | 1 |
| -50 – 50°C | 2 |
| 0 – 100°C | 3 |
| 0 – 150°C | 4 |
| 0 – 200°C | 5 |
| 0 – 300°C | 6 |
| 0 – 400°C | 7 |

| ● → Switch On | S2 |
|---------------|---------|
| Output | 1 2 3 4 |
| 0-10V | ● |
| 0-20mA | ● |
| 4-20mA | ● |

| Description | Part-No. | Type | PU |
|-------------------------------------|---|----------------|----------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V | 750822 | WPT 6-0822 |
| Spring terminal | | | |
| Rated voltage | AC/DC 24 V | 751822 | WPT 6-1822 |
| Input | | | |
| PT 100 | | | |
| Measurement input | PT100, 2/4-wire | | |
| Galvanic isolation I/O | 3-way isolation | | |
| Temperature range | -100–100°C / -100–150°C / -50–50°C / -0–100°C / 0–150°C / 0–200°C / 0–300°C / 0–400°C - adjustable via rotary switch S1 | | |
| Transmission frequency | 10 Hz | | |
| Input resistance | 240 kΩ | | |
| Sensor current | 0.5 mA | | |
| Zero /Span | Production comparison | | |
| Output | | | |
| | 0–10 V | 0–20 mA | 4–20 mA |
| Max. load impedance at I-output | – | 400 Ω | – |
| Max. load impedance at U-output | >1 kΩ | – | – |
| Load impedance | 55 Ω | – | – |
| Output current | max. 21 mA | – | – |
| Output signal | adjustable via DIP switch S2 | | |
| Ripple | <5 mV _{eff} | | |
| General | | | |
| Rated voltage | AC/DC 24 V | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | |
| Rated current | 10.0 mA | | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | |
| Accuracy | 0.3 % FSR | | |
| Linearity error | 0.1 % FSR | | |
| Rise time (10 - 90%) | 30 ms | | |
| Build-up time (Accuracy 1%) | 60 ms | | |
| Error coefficient of measuring line | 0.1 K + 0.1 %/Ω | | |
| Temperature coefficient | 150 ppm / K FSR | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Housing material | PPE | | |
| Field installation | rail TS 35 (EN 50022) | | |
| IP rating | IP 20 | | |
| Installation position | Optional | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -40 °C – 85 °C | | |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm | | |
| Weight (kg/piece) | 0.070 | | |
| Approvals | cULus in preparation | | |
| Standards | EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III | | |
| Accessories | | | |
| Colour | Article number | Type | Pkg. units |
| blue | 760801 | BK 6-0801 | 5 |
| white | 681311 | BZT 0720 | 100 |
| | 681031 | LEB-A4 | 1 |
| | 681033 | LEB-0615 | 1 |

Interface Technology - Microcompact Temperature Converter

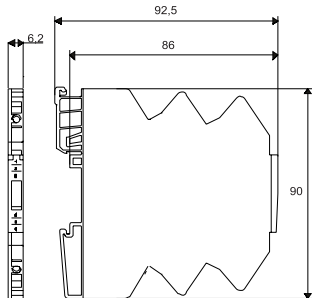
Input: PT100, 2-wire - with adjustable temperature range from - 50°C... +200°C

Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable

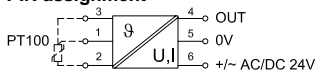
Insulation: 1.5 kV, 2-way isolation



Dimensions



PIN assignment



Range adjustment

| Range | Output | S1 | | | | | |
|-------------|--------|----|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| -50 – 150°C | 0-10V | | | | | | |
| -50 – 150°C | 0-20mA | ● | | | | | |
| -50 – 150°C | 4-20mA | | ● | | | | |
| 0 – 100°C | 0-10V | | ● | | | | |
| 0 – 100°C | 0-20mA | | | ● | | | |
| 0 – 100°C | 4-20mA | | ● | ● | | | |
| 0 – 200°C | 0-10V | | | ● | ● | | |
| 0 – 200°C | 0-20mA | | | ● | ● | | |
| 0 – 200°C | 4-20mA | | | | | ● | |

| Description | Part-No. | Type | PU |
|------------------------|------------|--------|------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V | 750919 | WPT 7-0919 |
| Spring terminal | | | |
| Rated voltage | AC/DC 24 V | 751919 | WPT 7-1919 |

| Input | | PT 1000 | |
|------------------------|--|---|--|
| Measurement input | | PT1000, 3-wire | |
| Galvanic isolation I/O | | 2-way isolation | |
| Temperature range | | -50–150°C / 0–100°C / 0–200°C; adjustable via DIP switch S1 | |
| Transmission frequency | | 10 Hz | |
| Input resistance | | 240 kΩ | |
| Sensor current | | 0.1 mA | |
| Zero /Span | | Production comparison | |

| Output | 0–10 V | 0–20 mA | 4–20 mA |
|---------------------------------|------------------------------|---------|---------|
| Max. load impedance at I-output | – | | 400 Ω |
| Max. load impedance at U-output | >1 kΩ | | – |
| Load impedance | 55 Ω | | – |
| Output current | max. 21 mA | | – |
| Output signal | adjustable via DIP switch S1 | | |
| Ripple | <5 mV _{eff} | | |

| General | |
|-------------------------------------|--|
| Rated voltage | AC/DC 24 V |
| Operation voltage range | DC: 16.8–30 V, AC: 19.2–28.8 V |
| Rated current | 8.0 mA |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof |
| Accuracy | 0.3 % FSR |
| Linearity error | 0.1 % FSR |
| Rise time (10 - 90%) | 30 ms |
| Build-up time (Accuracy 1%) | 60 ms |
| Error coefficient of measuring line | 0.1 K + 0.1 %/Ω |
| Temperature coefficient | 150 ppm / K FSR |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Housing material | PPE |
| Field installation | rail TS 35 (EN 50022) |
| IP rating | IP 20 |
| Installation position | Optional |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm |
| Weight (kg/piece) | 0.040 |
| Approvals | UL, CSA |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|----------------|--------|--------|--------|--------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |

| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|-----------|------------|
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Interface Technology - Microcompact Temperature Converter

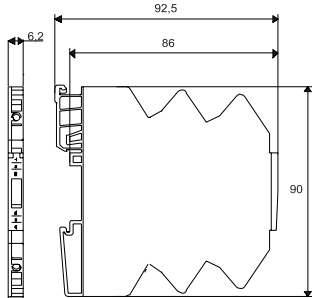
Input: PT 1000, 3-wire - with freely selectable temperature range from - 200°C... + 800°C

Output: 0–10 V

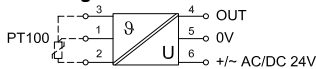
Insulation: 1.5 kV, 2-way isolation



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | | | | |
|--|--|----------------|------------|-----------|------------|---------|------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750921 | WPT 7-0921 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751921 | WPT 7-1921 | | | | |
| Input | | | | | | | |
| PT 1000 | | | | | | | |
| Measurement input | PT1000, 3-wire | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Temperature range | Setting according to customer order: -200°C...800°C. Please specify temperature range when ordering. Please observe: smallest temperature span 50°C, largest temperature span 500°C. | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 240 kΩ | | | | | | |
| Sensor current | 0.1 mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| 0 – 10 V | | | | | | | |
| Output signal | 0 – 10 V | | | | | | |
| Max. load impedance at I-output | – | | | | | | |
| Max. load impedance at U-output | >1 kΩ | | | | | | |
| Load impedance | 55 Ω | | | | | | |
| Output current | max. 21 mA | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V, AC: 19.2–28.8 V | | | | | | |
| Rated current | 8.0 mA | | | | | | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.3 % FSR | | | | | | |
| Linearity error | 0.1 % FSR | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | 0.1 K + 0.1 %/Ω | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | UL, CSA | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | | | | | | | |
| | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | | | | | | | |
| | Colour | Article number | | Type | Pkg. units | | |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | 100 | | |
| Isolation plate | | 760809 | | TP 7-0809 | 5 | | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | 1 | | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | 1 | | |

Interface Technology - Microcompact Temperature Converter

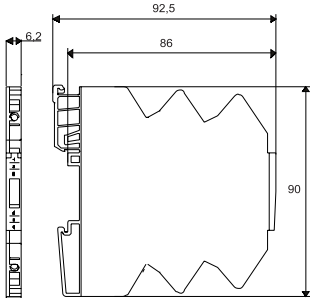
Input: Type J thermocouple - with fix adjustable temperature range from 0°C...+300°C

Output: 4–20 mA

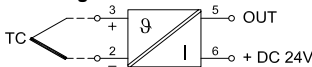
Insulation: 1.5 kV, 2-way isolation



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | | | | |
|--|--|----------------|------------|-----------|------------|---------|------------|
| Screw terminal | | | | | | | |
| Rated voltage | looped supply | 750836 | WTH 7-0836 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | looped supply | 751836 | WTH 7-1836 | 1 | | | |
| Input | | | | | | | |
| Measurement input | J (FeCuNi) | | | | | | |
| Galvanic isolation I/O | Type J (FeCuNi) according to DIN / IEC 584-1 | | | | | | |
| Temperature range | 2-way isolation | | | | | | |
| Transmission frequency | 0 – 300 °C | | | | | | |
| Input resistance | 10 Hz | | | | | | |
| Sensor current | 330 kΩ | | | | | | |
| Zero /Span | – mA | | | | | | |
| Output | Production comparison | | | | | | |
| Output signal | 4–20 mA | | | | | | |
| Max. load impedance at I-output | Rs=(Us–14 V) / 20 mA | | | | | | |
| Max. load impedance at U-output | Rs= Load resistance, Us= Input terminal voltage at the power supply | | | | | | |
| Load impedance | – | | | | | | |
| Output current | – Ω | | | | | | |
| Ripple | – | | | | | | |
| General | | | | | | | |
| Rated voltage | looped supply | | | | | | |
| Operation voltage range | Us _{min} = 14 V + 20 mA x Rs; Us _{max} = 28 V + 20 mA x Rs | | | | | | |
| Rated current | – mA | | | | | | |
| Status indication | – | | | | | | |
| Input/output protection | – | | | | | | |
| Accuracy | 0.5 % + 2 K FSR | | | | | | |
| Linearity error | 0.1 % FSR | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | – | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation postition | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | –25 °C – 60 °C | | | | | | |
| Storage temperature range | –40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.030 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | | | | | | | |
| | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | | | | | | | |
| | Colour | Article number | | Type | Pkg. units | | |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | 100 | | |
| Isolation plate | | 760809 | | TP 7-0809 | 5 | | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | 1 | | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | 1 | | |

Interface Technology - Microcompact Temperature Converter

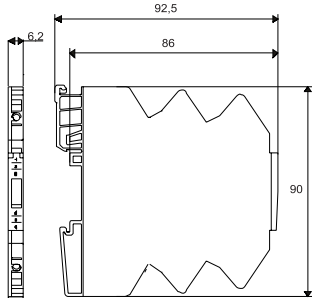
Input: Type J thermocouple - with adjustable temperature range from -50°C...+600°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

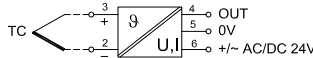
Insulation: 1.5 kV, 2-way isolation



Dimensions



PIN assignment



Range adjustment

| ● → Switch On | | S1 | | | | | |
|---------------|--------|----|---|---|---|---|---|
| Range | Output | 1 | 2 | 3 | 4 | 5 | 6 |
| -50 – 200°C | 0-10V | | | | | | |
| -50 – 200°C | 0-20mA | ● | | | | | |
| -50 – 200°C | 4-20mA | | ● | | | | |
| 0 – 400°C | 0-10V | ● | ● | | | | |
| 0 – 400°C | 0-20mA | | | ● | | | |
| 0 – 400°C | 4-20mA | ● | ● | | | | |
| 0 – 600°C | 0-10V | | | ● | ● | | |
| 0 – 600°C | 0-20mA | ● | ● | | | | |
| 0 – 600°C | 4-20mA | | | | | ● | |

| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|----------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750833 | WTH 7-0833 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751833 | WTH 7-1833 | | | | |
| Input J (FeCuNi) | | | | | | | |
| Measurement input | Type J (FeCuNi) according to DIN / IEC 584-1 | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Temperature range | - 50–200°C / 0–400°C / 0–600°C - adjustable via DIP switch S1 | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 330 kΩ | | | | | | |
| Sensor current | – mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | | | | |
| Max. load impedance at I-output | – | 400 Ω | – | | | | |
| Max. load impedance at U-output | >1 kΩ | – | – | | | | |
| Load impedance | 55 Ω | – | – | | | | |
| Output current | max. 21 mA | – | – | | | | |
| Output signal | adjustable via DIP switch S1 | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V, AC: 19.2–28.8 V | | | | | | |
| Rated current | 6.0 mA | | | | | | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.5 % + 2 K FSR | | | | | | |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | – | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w × h × d) | 6.2 × 90.0 × 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.030 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

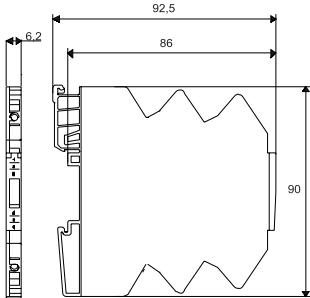
Input: Type J thermocouple - with freely selectable temperature range from -50°C...+800°C

Output: 0–10 V / 4–20 mA

Insulation: 1.5 kV, 2-way isolation

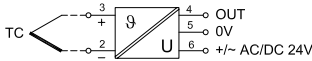


Dimensions

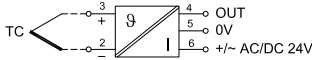


PIN assignment

750835



750834



| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|---------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750835 | WTH 7-0835 | 1 | | | |
| | AC/DC 24 V | 750834 | WTH 7-0834 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751835 | WTH 7-1835 | 1 | | | |
| | AC/DC 24 V | 751834 | WTH 7-1834 | 1 | | | |
| Input | | | | | | | |
| J (FeCuNi) | | | | | | | |
| Measurement input | Type J (FeCuNi) according to DIN / IEC 584-1 | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Temperature range | Setting according to customer order: -50°C...800°C. Please specify temperature range when ordering. Please observe: Smallest temperature span 200°C. | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 330 kΩ | | | | | | |
| Sensor current | – mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| | 750835/751835 | 750834/751834 | | | | | |
| Output signal | 0 – 10 V | 4–20 mA | | | | | |
| Max. load impedance at I-output | – | 400 Ω | | | | | |
| Max. load impedance at U-output | >1 kΩ | – | | | | | |
| Load impedance | 55 Ω | – | | | | | |
| Output current | max. 21 mA | – | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V, AC: 19.2–28.8 V | | | | | | |
| Rated current | 8.0 mA | | | | | | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.5 % + 2 K FSR | | | | | | |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | – | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

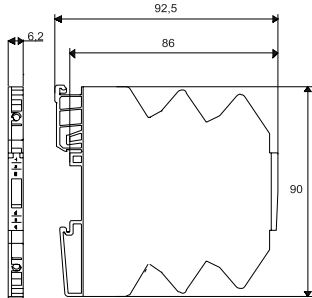
Input: Type J thermocouple - with adjustable temperature range from -50°C...+600°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

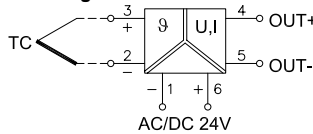
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



Range adjustment

| Range | Output | S1 | | | | | |
|-------------|--------|----|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| -50 – 200°C | 0-10V | | | | | | |
| -50 – 200°C | 0-20mA | ● | | | | | |
| -50 – 200°C | 4-20mA | | ● | | | | |
| 0 – 400°C | 0-10V | | ● | ● | | | |
| 0 – 400°C | 0-20mA | | | | ● | | |
| 0 – 400°C | 4-20mA | | ● | ● | | | |
| 0 – 600°C | 0-10V | | | | ● | ● | |
| 0 – 600°C | 0-20mA | | ● | ● | | | |
| 0 – 600°C | 4-20mA | | | | | | ● |

| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|----------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750839 | WTH 7-0839 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751839 | WTH 7-1839 | | | | |
| Input | | | | | | | |
| J (FeCuNi) | | | | | | | |
| Measurement input | Type J (FeCuNi) according to DIN / IEC 584-1 | | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Temperature range | -50–200°C / 0–400°C / 0–600°C - adjustable via DIP switch S1 | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 330 kΩ | | | | | | |
| Sensor current | – mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | | | | |
| Max. load impedance at I-output | – | | 400 Ω | | | | |
| Max. load impedance at U-output | >1 kΩ | | – | | | | |
| Load impedance | 55 Ω | | – | | | | |
| Output current | max. 21 mA | | – | | | | |
| Output signal | adjustable via DIP switch S1 | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V, AC: 19.2–28.8 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.5 % + 2 K FSR | | | | | | |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | – | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w × h × d) | 6.2 × 90.0 × 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

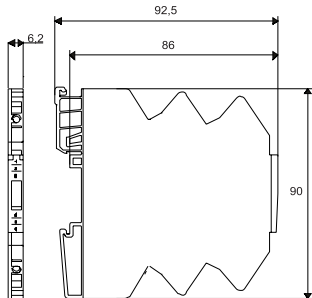
Input: Type J thermocouple - with freely selectable temperature range from -50°C...+800°C

Output: 0–10 V / 4–20 mA

Insulation: 1.5 kV; 3-way isolation

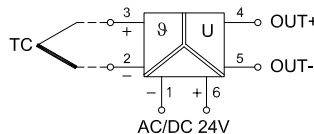


Dimensions

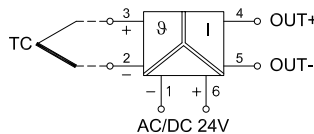


PIN assignment

750841



750840



| Description | Part-No. | Type | PU | | | | |
|--|--|----------------------|---------------|---------------|-----------------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750841 | WTH 7-0841 | 1 | | | |
| | AC/DC 24 V | 750840 | WTH 7-0840 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751841 | WTH 7-1841 | 1 | | | |
| | AC/DC 24 V | 751840 | WTH 7-1840 | 1 | | | |
| Input | | | | | | | |
| J (FeCuNi) | | | | | | | |
| Measurement input | Type J (FeCuNi) according to DIN / IEC 584-1 | | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Temperature range | Setting according to customer order: -50°C...800°C. Please specify temperature range when ordering. Please observe: Smallest temperature span 200°C. | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 330 kΩ | | | | | | |
| Sensor current | – mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| Output signal | 750841/751841 | 750840/751840 | | | | | |
| | 0 – 10 V | 4–20 mA | | | | | |
| Max. load impedance at I-output | – | 400 Ω | | | | | |
| Max. load impedance at U-output | >1 kΩ | – | | | | | |
| Load impedance | 55 Ω | – | | | | | |
| Output current | max. 21 mA | – | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V, AC: 19.2–28.8 V | | | | | | |
| Rated current | 8.0 mA | | | | | | |
| Status indication | LED yellow, blinks for wire break and output goes to a saturated state | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.5 % + 2 K FSR | | | | | | |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | – | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | | | | | | | |
| | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | | | | Colour | Article number | Type | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | | BZT 0411 | | 100 |
| Isolation plate | | 760809 | | | TP 7-0809 | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | | LEB - A4 | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | | LEB 0411 | | 1 |

Interface Technology - Microcompact Temperature Converter

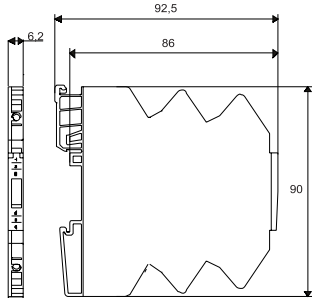
Input: Type J, K thermocouples - with adjustable temperature range from 0°C...-600°C

Output: 0–50 Hz / 0–100 Hz / 0–1000 Hz / 0–10.000 Hz

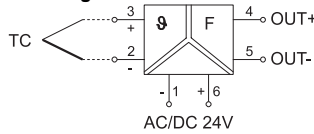
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



Range adjustment

| Range | Output | S1 | | | | | |
|-----------|-----------|----|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| 0 - 200°C | 0 - 50Hz | | | | | | |
| 0 - 200°C | 0 - 100Hz | ● | | | | | |
| 0 - 200°C | 0 - 1kHz | ● | ● | | | | |
| 0 - 200°C | 0 - 10kHz | ● | ● | ● | | | |
| 0 - 400°C | 0 - 50Hz | ● | | | | | |
| 0 - 400°C | 0 - 100Hz | ● | ● | | | | |
| 0 - 400°C | 0 - 1kHz | ● | ● | ● | | | |
| 0 - 400°C | 0 - 10kHz | ● | ● | ● | ● | | |
| 0 - 600°C | 0 - 50Hz | ● | | | | | ● |
| 0 - 600°C | 0 - 100Hz | ● | ● | | | | ● |
| 0 - 600°C | 0 - 1kHz | ● | ● | ● | | | ● |
| 0 - 600°C | 0 - 10kHz | ● | ● | ● | ● | | ● |

| Description | Part-No. | Type | PU | | | | |
|--|--|----------------------|----------------------|-----------------------|--------|-------------|------------|
| Screw terminal | | | | | | | |
| J | 750831 | WTHF 7-0831 | 1 | | | | |
| K | 750871 | WTHF 7-0871 | 1 | | | | |
| Spring terminal | | | | | | | |
| J | 751831 | WTHF 7-1831 | 1 | | | | |
| K | 751871 | WTHF 7-1871 | 1 | | | | |
| Input | | 750831/751831 | 750871/751871 | | | | |
| Measurement input | Typ J (FeCuNi) | Typ K (NiCrNi) | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Temperature range | 0–200°C / 0–400°C / 0–600°C | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 330 kΩ | | | | | | |
| Sensor current | – mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| Frequency | | | | | | | |
| Output signal | 0–50 Hz / 0–100 Hz / 0–1000 Hz / 0–10.000 Hz - adjustable via DIP switch S1 | | | | | | |
| Max. load impedance at I-output | – | | | | | | |
| Max. load impedance at U-output | ≥2500 Ω, Output level ca. 10 V | | | | | | |
| Load impedance | 55 Ω | | | | | | |
| Output current | 21 mA | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.5 % + 2K FSR | | | | | | |
| Linearity error | 0.1 % FSR; thermoelectrical potential linear | | | | | | |
| Rise time (10 - 90%) | frequency-dependent | | | | | | |
| Build-up time (Accuracy 1%) | frequency-dependent | | | | | | |
| Transmission frequency | <30 Hz | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/ spring terminal: 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | | | | | | | |
| | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | | | | Article number | | Type | |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | 1 | |

Interface Technology - Microcompact Temperature Converter

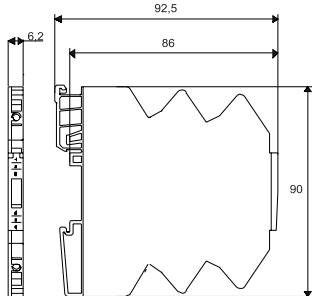
Input: Type K thermocouple - with fix adjustable temperature range from 0°C...+300°C

Output: 4–20 mA

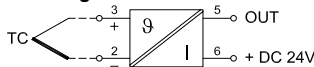
Insulation: 1.5 kV, 2-way isolation



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | | | | |
|--|--|--------|------------|----------------|-----------|------------|------------|
| Screw terminal | | | | | | | |
| Rated voltage | looped supply | 750876 | WTH 7-0876 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | looped supply | 751876 | WTH 7-1876 | | | | |
| Input | | | | | | | |
| Measurement input | K (NiCrNi) | | | | | | |
| Galvanic isolation I/O | Type K (NiCrNi) with DIN / IEC 584-1 | | | | | | |
| Temperature range | 2-way isolation | | | | | | |
| Transmission frequency | 0 – 300 °C | | | | | | |
| Input resistance | 10 Hz | | | | | | |
| Sensor current | 330 kΩ | | | | | | |
| Zero /Span | – mA | | | | | | |
| Output | Production comparison | | | | | | |
| Output signal | 4–20 mA | | | | | | |
| Max. load impedance at I-output | Rs= (Us–14 V) / 20 mA | | | | | | |
| Max. load impedance at U-output | Rs= Load resistance, Us= Input terminal voltage at the power supply | | | | | | |
| Load impedance | – | | | | | | |
| Output current | – Ω | | | | | | |
| Ripple | – | | | | | | |
| General | | | | | | | |
| Rated voltage | looped supply | | | | | | |
| Operation voltage range | Us _{min} = 14 V + 20 mA x Rs; Us _{max} = 28 V + 20 mA x Rs | | | | | | |
| Rated current | – mA | | | | | | |
| Status indication | – | | | | | | |
| Input/output protection | – | | | | | | |
| Accuracy | 0.5 % + 2 K FSR | | | | | | |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | – | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation postition | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Operation temperature range | –25 °C – 60 °C | | | | | | |
| Storage temperature range | –40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | | | | | | | |
| | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | | | | Article number | Type | Pkg. units | |
| Tag holder 4x11 mm | white | | 681313 | | BZT 0411 | | 100 |
| Isolation plate | | | 760809 | | TP 7-0809 | | 5 |
| Labels for laser printer A4 unpunched | | | 681031 | | LEB - A4 | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | | 681034 | | LEB 0411 | | 1 |

Interface Technology - Microcompact Temperature Converter

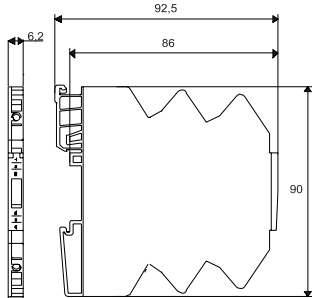
Input: Type K thermocouple - with adjustable temperature range from -50°C...+600°C

Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable

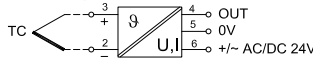
Insulation: 1.5 kV, 2-way isolation



Dimensions



PIN assignment



Range adjustment

| ● → Switch On | | S1 | | | | | |
|---------------|--------|----|---|---|---|---|---|
| Range | Output | 1 | 2 | 3 | 4 | 5 | 6 |
| -50 – 200°C | 0-10V | | | | | | |
| -50 – 200°C | 0-20mA | ● | | | | | |
| -50 – 200°C | 4-20mA | | ● | | | | |
| 0 – 400°C | 0-10V | ● | ● | | | | |
| 0 – 400°C | 0-20mA | | | ● | | | |
| 0 – 400°C | 4-20mA | ● | ● | | | | |
| 0 – 600°C | 0-10V | | | ● | ● | | |
| 0 – 600°C | 0-20mA | ● | ● | | | | |
| 0 – 600°C | 4-20mA | | | ● | ● | | |

| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|----------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750873 | WTH 7-0873 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751873 | WTH 7-1873 | | | | |
| Input | | | | | | | |
| K (NiCrNi) | | | | | | | |
| Measurement input | Type K (NiCrNi) with DIN / IEC 584-1 | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Temperature range | -50–200°C / 0–400°C / 0–600°C adjustable via DIP switch S1 | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 330 kΩ | | | | | | |
| Sensor current | – mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | | | | |
| Max. load impedance at I-output | – | 400 Ω | – | | | | |
| Max. load impedance at U-output | >1 kΩ | – | – | | | | |
| Load impedance | 55 Ω | – | – | | | | |
| Output current | max. 21 mA | – | – | | | | |
| Output signal | adjustable via DIP switch S1 | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 8.0 mA | | | | | | |
| Status indication | LED yellow; blinks for wire break and output goes to a saturated state. | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.5 % + 2 K FSR | | | | | | |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | – | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w × h × d) | 6.2 × 90.0 × 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.030 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

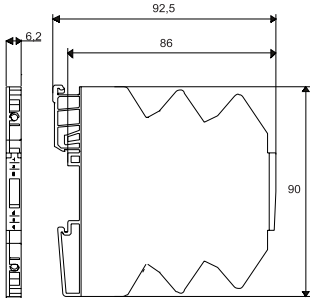
Input: Type K thermocouple - with freely selectable temperature range from -50°C...+1200°C

Output: 0–10 V / 4–20 mA

Insulation: 1.5 kV, 2-way isolation

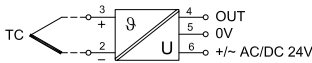


Dimensions

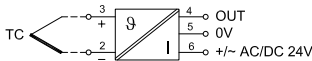


PIN assignment

750875



750874



| Description | Part-No. | Type | PU | | | | |
|--|---|-----------------------|----------------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750875 | WTH 7-0875 | 1 | | | |
| | AC/DC 24 V | 750874 | WTH 7-0874 | 1 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751875 | WTH 7-1875 | 1 | | | |
| | AC/DC 24 V | 751874 | WTH 7-1874 | 1 | | | |
| Input | | | | | | | |
| K (NiCrNi) | | | | | | | |
| Measurement input | Type K (NiCrNi) with DIN / IEC 584-1 | | | | | | |
| Galvanic isolation I/O | 2-way isolation | | | | | | |
| Temperature range | Settings according to customer order: -50°C...+1200°C. Please specify temperature range when ordering. Please observe: Smallest temperature span 200°C. | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 330 kΩ | | | | | | |
| Sensor current | – mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | 750875/751875 | 750874/751874 | | | | |
| Output signal | 0 – 10 V | 4–20 mA | | | | | |
| Max. load impedance at I-output | – | 400 Ω | | | | | |
| Max. load impedance at U-output | >1 kΩ | – | | | | | |
| Load impedance | 55 Ω | – | | | | | |
| Output current | max. 21 mA | – | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 8.0 mA | | | | | | |
| Status indication | LED yellow; blinks for wire break and output goes to a saturated state. | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.5 % + 2 K FSR | | | | | | |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | – | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

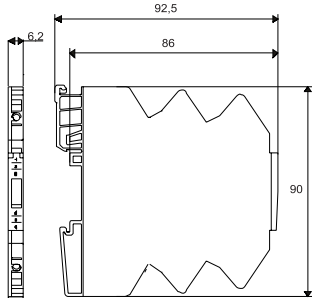
Input: Type K thermocouple - with freely selectable temperature range from -50°C...+1200°C

Output: 0–10 V / 4–20 mA

Insulation: 1.5 kV; 3-way isolation

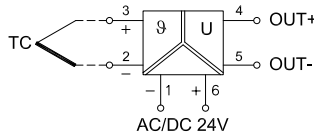


Dimensions

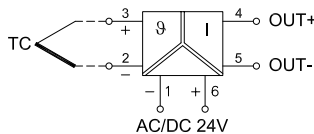


PIN assignment

750861



750860



| Description | Part-No. | Type | PU | |
|------------------------|------------|--------|------------|---|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 750861 | WPT 7-0861 | 1 |
| | AC/DC 24 V | 750860 | WPT 7-0860 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 751861 | WTH 7-1861 | 1 |
| | AC/DC 24 V | 751860 | WTH 7-1860 | 1 |

| Input | | K (NiCrNi) | |
|------------------------|--|------------|--|
| Measurement input | Type K (NiCrNi) with DIN / IEC 584-1 | | |
| Galvanic isolation I/O | 3-way isolation | | |
| Temperature range | Settings according to customer order. : -50°C...+1200°C.Please specify temperature range when ordering. Please observe: Smallest temperature span 200°C. | | |

| | |
|------------------------|-----------------------|
| Transmission frequency | 10 Hz |
| Input resistance | 330 kΩ |
| Sensor current | – mA |
| Zero /Span | Production comparison |

| Output | 750861/751861 | 750860/751860 |
|---------------------------------|----------------------|---------------|
| Output signal | 0 – 10 V | 4–20 mA |
| Max. load impedance at I-output | – | 400 Ω |
| Max. load impedance at U-output | >1 kΩ | – |
| Load impedance | 55 Ω | – |
| Output current | max. 21 mA | – |
| Ripple | <5 mV _{eff} | |

| General | |
|-------------------------------------|--|
| Rated voltage | AC/DC 24 V |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V |
| Rated current | 13.0 mA |
| Status indication | LED yellow; blinks for wire break and output goes to a saturated state. |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof |
| Accuracy | 0.5 % + 2 K FSR |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear |
| Rise time (10 - 90%) | 30 ms |
| Build-up time (Accuracy 1%) | 60 ms |
| Error coefficient of measuring line | – |
| Temperature coefficient | 150 ppm / K FSR |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Housing material | PPE |
| Field installation | rail TS 35 (EN 50022) |
| IP rating | IP 20 |
| Installation position | Optional |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w × h × d) | 6.2 × 90.0 × 92.5 mm |
| Weight (kg/piece) | 0.040 |
| Approvals | cULus |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|--|--------|----------------|--------|-----------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

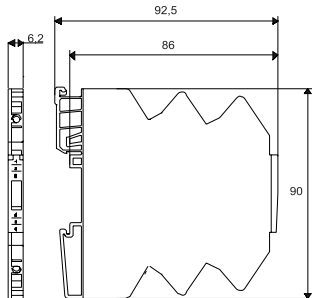
Input: Type K thermocouple - with adjustable temperature range from -50°C...+600°C

Output: 0–10 V / 0–20 mA / 4–20 mA - adjustable

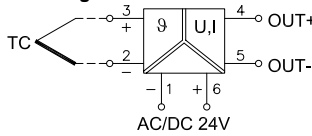
Insulation: 1.5 kV; 3-way isolation



Dimensions



PIN assignment



Range adjustment

| Range | Output | S1 | | | | | |
|-------------|--------|----|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| -50 – 200°C | 0-10V | | | | | | |
| -50 – 200°C | 0-20mA | ● | | | | | |
| -50 – 200°C | 4-20mA | | ● | | | | |
| 0 – 400°C | 0-10V | ● | | | | | |
| 0 – 400°C | 0-20mA | | ● | | | | |
| 0 – 400°C | 4-20mA | | | ● | | | |
| 0 – 600°C | 0-10V | ● | ● | | | | |
| 0 – 600°C | 0-20mA | | ● | ● | | | |
| 0 – 600°C | 4-20mA | | | ● | ● | | |

| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|----------------|---------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 750869 | WTH 7-0869 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 751869 | WTH 7-1869 | | | | |
| Input | | | | | | | |
| K (NiCrNi) | | | | | | | |
| Measurement input | Type K (NiCrNi) with DIN / IEC 584-1 | | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Temperature range | -50–200°C / 0–400°C / 0–600°C - adjustable via DIP switch S1 | | | | | | |
| Transmission frequency | 10 Hz | | | | | | |
| Input resistance | 330 kΩ | | | | | | |
| Sensor current | – mA | | | | | | |
| Zero /Span | Production comparison | | | | | | |
| Output | | | | | | | |
| | 0–10 V | 0–20 mA | 4–20 mA | | | | |
| Max. load impedance at I-output | – | – | 400 Ω | | | | |
| Max. load impedance at U-output | >1 kΩ | – | – | | | | |
| Load impedance | 55 Ω | – | – | | | | |
| Output current | max. 21 mA | – | – | | | | |
| Output signal | adjustable via DIP switch S1 | | | | | | |
| Ripple | <5 mV _{eff} | | | | | | |
| General | | | | | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Operation voltage range | DC: 16.8–30 V; AC: 19.2–28.8 V | | | | | | |
| Rated current | 13.0 mA | | | | | | |
| Status indication | LED yellow; blinks for wire break and output goes to a saturated state. | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Accuracy | 0.5 % + 2 K FSR | | | | | | |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear | | | | | | |
| Rise time (10 - 90%) | 30 ms | | | | | | |
| Build-up time (Accuracy 1%) | 60 ms | | | | | | |
| Error coefficient of measuring line | – | | | | | | |
| Temperature coefficient | 150 ppm / K FSR | | | | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | | | | |
| Housing material | PPE | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 85 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus | | | | | | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | | 100 |
| Isolation plate | | 760809 | | TP 7-0809 | | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | | 1 |

Interface Technology - Microcompact Temperature Converter

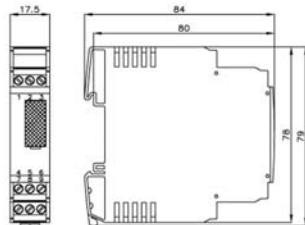
Input: Type J, K thermocouples - with adjustable temperature range from -50°C...+1200°C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

Insulation: 4.0 kV, 3-way isolation

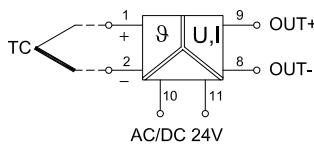


Dimensions

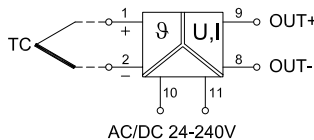


PIN assignment

AC/DC 24 V



AC/DC 24–240 V



Range adjustment

| S1 | | | |
|-----------|------|-----------|------|
| Range (J) | Pos. | Range (K) | Pos. |
| -50–200°C | 0 | -50–200°C | 8 |
| -50–350°C | 1 | -50–350°C | 9 |
| 0–200°C | 2 | 0–200°C | A |
| 0–400°C | 3 | 0–400°C | B |
| 0–600°C | 4 | 0–600°C | C |
| 0–800°C | 5 | 0–800°C | D |
| 0–1000°C | 6 | 0–1000°C | E |
| 0–1200°C | 7 | 0–1200°C | F |

| Output | S2 | | | |
|--------|----|---|---|---|
| | 1 | 2 | 3 | 4 |
| 0-10V | ● | | | |
| 0-20mA | | ● | | |
| 4-20mA | | | ● | |

| Description | Part-No. | Type | PU | |
|------------------------|----------------|--------|------------|---|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 750844 | WTH 6-0844 | 1 |
| | AC/DC 24–240 V | 750847 | WTH 6-0847 | 1 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 751844 | WTH 7-1844 | 1 |
| | AC/DC 24–240 V | 751847 | WTH 7-1847 | 1 |

| Input | J (FeCuNi), K (NiCrNi) |
|------------------------|---|
| Measurement input | J (FeCuNi), K (NiCrNi) according to DIN / IEC 584-1 |
| Galvanic isolation I/O | 3-way isolation |
| Temperature range | -50–200°C / -50–350°C / 0–200°C / 0–400°C / 0–600°C / 0–800°C / 0–1000°C / 0–1200°C - adjustable via rotary switch S1 |

| | |
|------------------------|-----------------------|
| Transmission frequency | 10 Hz |
| Input resistance | 330 kΩ |
| Sensor current | – |
| Zero /Span | Production comparison |

| Output | 0–10 V | 0–20 mA | 4–20 mA |
|---------------------------------|------------------------------|---------|---------|
| Max. load impedance at I-output | – | 400 Ω | – |
| Max. load impedance at U-output | >1 kΩ | – | – |
| Load impedance | 55 Ω | – | – |
| Output current | max. 21 mA | – | – |
| Output signal | adjustable via DIP switch S2 | | |
| Ripple | <5 mV _{eff} | | |

| General | 750844/751844 | 750847/751847 |
|-------------------------------------|--|------------------------------------|
| Rated voltage | AC/DC 24 V | AC/DC 24–240 V |
| Operation voltage range | DC: 16.8 – 30 V; AC: 19.2 – 28.8 V | DC: 16.8 – 264 V; AC: 19.2 – 264 V |
| Termination | Screw-/spring terminal 0.14–2.5 mm ² | |
| Rated current | 10.0 mA | |
| Status indication | LED yellow; blinks for wire break and output goes to a saturated state. | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | |
| Accuracy | 0.5 % + 2 K FSR | |
| Linearity error | 0.1 % FSR, thermoelectrical potential linear | |
| Rise time (10 - 90%) | 30 ms | |
| Build-up time (Accuracy 1%) | 60 ms | |
| Error coefficient of measuring line | – | |
| Temperature coefficient | 150 ppm / K FSR | |
| Insulation voltage input/output | 4.0 kV _{eff} | |
| Housing material | PPE | |
| Field installation | rail TS 35 (EN 50022) | |
| IP rating | IP 20 | |
| Installation position | Optional | |
| Operation temperature range | -25 °C – 60 °C | |
| Storage temperature range | -40 °C – 85 °C | |
| Dimensions (w x h x d) | 17.5 x 79.0 x 84.0 mm | |
| Weight (kg/piece) | 0.070 | |
| Approvals | cULus | |
| Standards | EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III | |

| Accessories | Colour | Article number | Type | Pkg. units |
|---|--------|----------------|-----------|------------|
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| marker holder | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 | 1 |

Interface Technology - Microcompact Temperature Converter

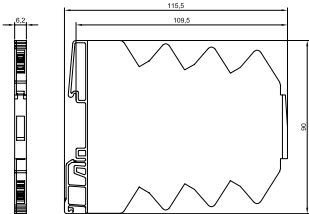
Input: PT, thermocouple, KTY, PTC, Poti - Programmable temperature converter

Output: 0–10 V / 0–20 mA / 4–20 mA

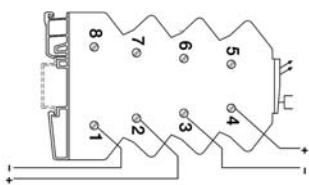
Insulation: 2.5 kV, 3-way isolation



Dimensions



PIN assignment

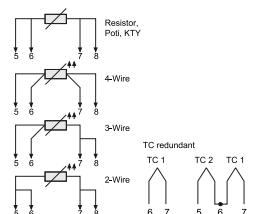


Temperature range

| | |
|---------------|---------------|
| Typ B | 0...1820°C |
| Typ C | 0...2300°C |
| Typ D | 0...2400°C |
| Typ E | -200...1000°C |
| Typ J | -200...1200°C |
| Typ K | -200...1372°C |
| Typ L | -200...900°C |
| Typ N | -200...1300°C |
| Typ R | -50...1760°C |
| Typ S | -50...1760°C |
| Typ T | -200...400°C |
| Typ U | -200...400°C |
| PT100 | -200...850°C |
| PT500 | -200...850°C |
| PT1000 | -200...850°C |
| NI1000 | -58...208°C |
| KTY 81-110 | -58...150°C |
| KTY 81-120 | -58...150°C |
| KTY 81-121 | -58...150°C |
| KTY 82-122 | -58...150°C |
| KTY 82-150 | -58...150°C |
| KTY 82-151 | -58...150°C |
| KTY 82-152 | -58...150°C |
| KTY 83-110 | -58...150°C |
| KTY 83-120 | -58...150°C |
| KTY 83-121 | -58...150°C |
| KTY 83-122 | -58...150°C |
| KTY 83-150 | -58...150°C |
| KTY 83-151 | -58...150°C |
| KTY 83-152 | -58...150°C |
| KTY 84-130 | -40...300°C |
| KTY 84-150 | -40...300°C |
| KTY 84-151 | -40...300°C |
| KTY 84-152 | -40...300°C |
| KTY xyz | 0...200°C |
| Poti (2-Wire) | 0...5 kΩ* |

| Description | Part-No. | Type | PU | | | | |
|--|---|--|--------------|--------|----------------|---------|------------|
| Screw terminal | | | | | | | |
| Rated voltage | DC 24 V | 750890 | WTPR 7-0890 | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | DC 24 V | 751890 | WTPR 7-1890 | | | | |
| Input | | | | | | | |
| Measurement input | PT, Ni, PTC, KTY, Poti PT 100, PT 500, PT 1000, Ni 100, Ni 1000, PTC, KTY, Potentiometer 0–5 kΩ | Thermocouples Type B, C, D, E, J, K, L, N, R, S, T, U | | | | | |
| Temperature range | -200...+850°C, according to type | -200...+2400°C, according to type | | | | | |
| Input resistance | – | appr. 1 MΩ | | | | | |
| Sensor current | 0.5 mA at PT | – | | | | | |
| Circuit | PT - 2, 3, 4 - wire, for 2-wire with offset correction | Redundancy function possible | | | | | |
| Galvanic isolation I/O | 3-way isolation | | | | | | |
| Transmission frequency | 0.5 Hz | | | | | | |
| Output | | | | | | | |
| Max. load impedance at I-output | 0–10 V | 2–10 V | 0–20 mA | | | | |
| Max. load impedance at U-output | – | – | 400 Ω | | | | |
| Load deviation | > 2 kΩ | – | – | | | | |
| Control range / Output current | ≤ 0,15 % | – | ≤ 0,07 % | | | | |
| Output signal | 10,6 V | 10,6 V | max. 21,2 mA | | | | |
| Ripple | programmable with programming tool 750891 | | | | | | |
| General | | | | | | | |
| Accuracy | PT, Ni, PTC, KTY, Poti typ. 0,1% FSR | Thermocouples B, E, J, K, L, N, R, S, T, U: typ. 0,2% / C, D: typ. 0,5% | | | | | |
| Internal temperature compensation | – | ±1 K typ. maximal ±1,2 K | | | | | |
| External temperature compensation | – | Recommendation high-temperature thermocouple | | | | | |
| Termination | Screw-/spring terminal 0.14–1.5 mm ² | | | | | | |
| Rated voltage | DC 24 V | | | | | | |
| Operation voltage range | 20–30 V | | | | | | |
| Rated current | 5.0 mA | | | | | | |
| Status indication | LED green; blinking green = Sensor fault, wire break, short-circuit etc. | | | | | | |
| Input/output protection | Overvoltage AC/DC 30 V, Output short circuit-proof | | | | | | |
| Resolution | 0.1°C, 16-Bit processing | | | | | | |
| Linearity error | ±0.03% above measurement range | | | | | | |
| Temperature error | <30 ppm / °C | | | | | | |
| Data storage | Nonvolatile EEPROM | | | | | | |
| Insulation voltage input/output | 2.5 kV _{eff} | | | | | | |
| Housing material | PA | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| IP rating | IP 20 | | | | | | |
| Installation position | Optional | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 84 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 115.5 mm | | | | | | |
| Weight (kg/piece) | 0.040 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Accessories | | | | | | | |
| | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | | | | Colour | Article number | Type | Pkg. units |
| Tag holder 4x11 mm | white | | 681313 | | BZT 0411 | | 100 |
| Isolation plate | | | 760809 | | TP 7-0809 | | 5 |
| Labels for laser printer A4 unpunched | | | 681031 | | LEB - A4 | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | | 681034 | | LEB 0411 | | 1 |

Circuit



Interface Technology - Microcompact Relay Module

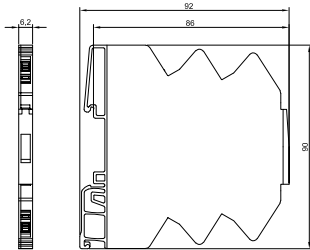
AC/DC-Relay-Interface, 1 Relay with 1 CO contact

AC/DC 250 V, 6 A, 1500 VA

Screw-/spring terminal, contact material: AgSnO₂

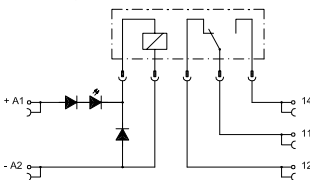


Dimensions

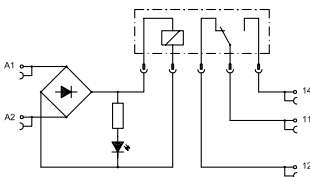


PIN assignment

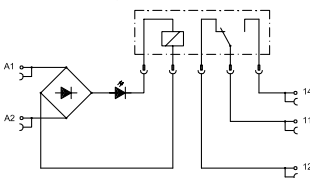
DC 12 V, DC 24 V



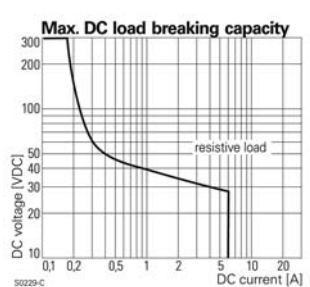
AC/DC 24 V



AC/DC 115 V, AC/DC 230 V



Limit curve



| Description | Part-No. | Type | PU | |
|------------------------|-------------|--------|-----------------------|---|
| Screw terminal | | | | |
| Rated voltage | DC 12 V | 762321 | RE 7-2321 DC 12 V | 5 |
| | DC 24 V | 762312 | RE 7-2312 DC 24 V | 5 |
| | AC/DC 24 V | 762313 | RE 7-2313 AC/DC 24 V | 5 |
| | AC/DC 115 V | 762316 | RE 7-2316 AC/DC 115 V | 5 |
| | AC/DC 230 V | 762317 | RE 7-2317 AC/DC 230 V | 5 |
| Spring terminal | | | | |
| Rated voltage | DC 12 V | 762320 | RE 7-2320 DC 12 V | 5 |
| | DC 24 V | 762302 | RE 7-2302 DC 24 V | 5 |
| | AC/DC 24 V | 762303 | RE 7-2303 AC/DC 24 V | 5 |
| | AC/DC 115 V | 762306 | RE 7-2306 AC/DC 115 V | 5 |
| | AC/DC 230 V | 762307 | RE 7-2307 AC/DC 230 V | 5 |

| Input | DC 12 V | DC 24 V | AC/DC 24 V | AC/DC 115 V | AC/DC 230 V |
|-------------------------------------|---------------------------|---------------|-----------------------|-----------------------|-----------------|
| Input voltage range | 10.2 – 15.0 V | 20.4 – 30.0 V | 16.8 – 30.0 V | 92.0 – 126.5 V | 184.0 – 253.0 V |
| Rated current | 17.0 mA | 6.0 mA | 20.0 mA | 4.0 mA | 3.5 mA |
| Interrupting voltage | <2 V | | <2.4 V | <11 V | <23 V |
| Protection device | Reverse- / overload diode | | Bridge rectifier | | |
| Rated insulation voltage (EN 50178) | 50 V | | 150 V | | |
| Max. length of connecting lead | 2000 m | | DC: 500 m AC: 70 m | DC: 500 m AC: 40 m | |
| Status indication | LED yellow | | | | |
| Rated frequency | - | | | 50–60 Hz | |

| Output | |
|---|--|
| Contact type | 1 change over contact |
| Min. switching voltage | AC/DC 17 V |
| Max. switching voltage | AC/DC 250 V |
| Min. switching current | AC/DC 5 mA |
| Max. switching current | AC/DC 6 A |
| Switching capacity AC 15 | 3 A |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA |
| Max. switching capacity | 1500 VA |
| Contact material | AgSnO ₂ |
| Mechanical service life | > 5 x 10 ⁶ operations |
| Switch-on delay | 5 ms |
| Switch-off delay | 4 ms |
| Clearance/creep. dist. (contol/load side) | >5.5 mm |
| Rated insulation voltage (EN 50178) | 300 V |

| General | |
|---------------------------------|-----------------------|
| Housing material | PPE |
| IP rating | IP 20 |
| Field installation | rail TS 35 (EN 50022) |
| Insulation voltage input/output | 4.0 kV _{eff} |
| Safe isolation | yes |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 80 °C |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm |
| Weight (kg/piece) | 0.035 |
| Approvals | cULus in preparation |

| Termination | Screw-/spring terminal 0.5–1.5 mm ² | | | | | | |
|--|--|----------------|--------|--------|-----------|---------|------------|
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | | Type | | Pkg. units |
| Tag holder 4x11 mm | white | 681313 | | | BZT 0411 | | 100 |
| Isolation plate | | 760809 | | | TP 7-0809 | | 5 |
| Labels for laser printer A4 unpunched | | 681031 | | | LEB - A4 | | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | | LEB 0411 | | 1 |

Comments
For operation with rated voltage and 100% ED over 24h/day, a distance of = 10 mm must be complied with between the modules or to the neighboring switching components.

Interface Technology - Microcompact Relay Module

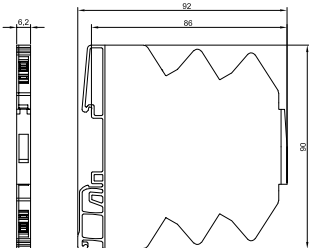
DC-Relay-Interface, 1 Relay, 1 CO contact

AC/DC 250 V, 6 A, 1500 VA

Spring terminal, contact material: AgSnO₂ + 5 µm HV

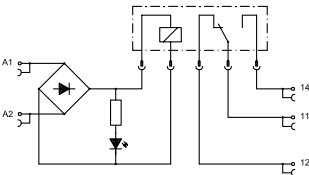


Dimensions

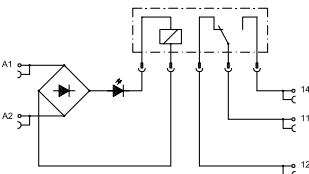


PIN assignment

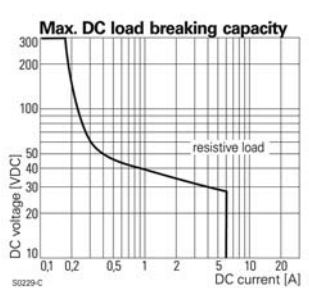
DC 24 V, DC 36 V



DC 72 V, DC 110 V



Limit curve



| Description | Part-No. | Type | PU | |
|------------------------|----------|--------|--------------------|---|
| Spring terminal | | | | |
| Rated voltage | DC 24 V | 762332 | RE 7-2332 DC 24 V | 5 |
| | DC 36 V | 762333 | RE 7-2333 DC 36 V | 5 |
| | DC 72 V | 762335 | RE 7-2335 DC 72 V | 5 |
| | DC 110 V | 762336 | RE 7-2336 DC 110 V | 5 |

| Input | DC 24 V | DC 36 V | DC 72 V | DC 110 V |
|----------------------|---------------|---------------|---------------|----------------|
| Input voltage range | 16.8 – 30.0 V | 25.2 – 45.0 V | 50.4 – 90.0 V | 77.0 – 137.5 V |
| Rated current | 20.0 mA | 12.0 mA | 3.5 mA | 4.0 mA |
| Interrupting voltage | <2.4 V | <3.6 V | <7.2 V | <11 V |

| Protection device | Bridge rectifier | | | |
|-------------------------------------|------------------|--|-------|-------|
| Rated insulation voltage (EN 50178) | 50 V | | 100 V | 160 V |

| | | | | |
|--------------------------------|------------|--|--|--|
| Max. length of connecting lead | – | | | |
| Status indication | LED yellow | | | |
| Rated frequency | – | | | |

| Output | – | | | |
|--------------------------|--|--|--|--|
| Contact type | 1 change over contact | | | |
| Min. switching voltage | AC/DC 1 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 1 mA | | | |
| Max. switching current | AC/DC 6 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |

| | | | | |
|-------------------------|-----------------------------|--|--|--|
| Max. switching capacity | 1500 VA | | | |
| Contact material | AgSnO ₂ +5 µm HV | | | |

| | | | | |
|--|-----------------------------------|--|--|--|
| Mechanical service life | > 20 x 10 ⁶ operations | | | |
| Switch-on delay | ca. 5 ms | | | |
| Switch-off delay | ca. 5 ms | | | |
| Clearance/creep. dist. (control/load side) | >5.5 mm | | | |

| | | | | |
|-------------------------------------|-------|--|--|--|
| Rated insulation voltage (EN 50178) | 320 V | | | |
|-------------------------------------|-------|--|--|--|

| General | | | | | | |
|---------------------------------|---|--|--|--|--|--|
| Housing material | PPE | | | | | |
| IP rating | IP 20 | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | | | |
| Safe isolation | yes | | | | | |
| Operation temperature range | -25 °C – 70 °C | | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | |
| Weight (kg/piece) | 0.035 | | | | | |
| Approvals | cULus in preparation | | | | | |
| Termination | Spring terminal 0.5–1.5 mm ² | | | | | |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|----------------|--------|--------|--------|--------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |

| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|-----------|------------|
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB - A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Comments

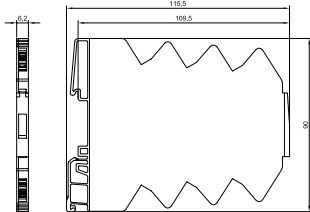
Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact. For operation with rated voltage and 100% ED over 24h/day, a distance of = 10 mm must be complied with between the modules or to the neighboring switching components.

Interface Technology - Microcompact Relay Module

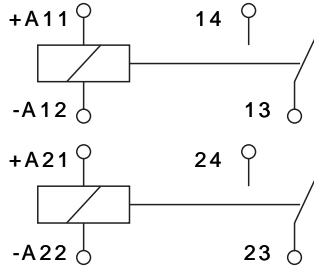
DC-Relay-Interface, 2 Relay with 1 CO contact
AC/DC 250 V, 6 A, 1500 VA
Spring terminal, contact material: AgSnO₂



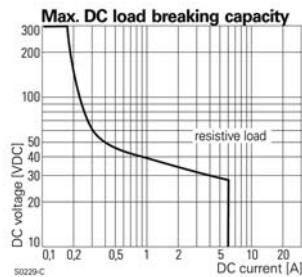
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|-------------------|---------------|---------------|-------------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | DC 24 V | 762401 | RE 7-2401 DC 24 V | 3 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | DC 24 V | 762411 | RE 7-2411 DC 24 V | 3 | | | |
| Input | | | | | | | |
| DC 24 V | | | | | | | |
| Input voltage range | 20.4 – 30.0 V | | | | | | |
| Rated current | 6.0 mA | | | | | | |
| Interrupting voltage | <2.4 V | | | | | | |
| Protection device | Reverse- / overload diode | | | | | | |
| Rated insulation voltage (EN 50178) | 50 V | | | | | | |
| Max. length of connecting lead | 2000 m | | | | | | |
| Status indication | LED yellow | | | | | | |
| Rated frequency | - | | | | | | |
| Output | | | | | | | |
| each relay | | | | | | | |
| Contact type | N/O contact | | | | | | |
| Min. switching voltage | AC/DC 17 V | | | | | | |
| Max. switching voltage | AC/DC 250 V | | | | | | |
| Min. switching current | AC/DC 5 mA | | | | | | |
| Max. switching current | AC/DC 6 A | | | | | | |
| Switching capacity AC 15 | 3 A | | | | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | | | | |
| Max. switching capacity | 1500 VA | | | | | | |
| Contact material | AgSnO ₂ | | | | | | |
| Mechanical service life | > 5 x 10 ⁶ operations | | | | | | |
| Switch-on delay | 5 ms | | | | | | |
| Switch-off delay | 4 ms | | | | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | | | | |
| General | | | | | | | |
| Housing material | PA | | | | | | |
| IP rating | IP 20 | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | | | | |
| Safe isolation | yes | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 115.5 mm | | | | | | |
| Weight (kg/piece) | 0.055 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Termination | Screw-/spring terminal 0.5–1.5 mm ² | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |
| Accessories | Colour | Article number | | Type | | Pkg. units | |
| Tag holder 4x11 mm | white | 681313 | | BZT 0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB - A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB 0411 | | 1 | |
| Comments | | | | | | | |
| For operation with rated voltage and 100% ED over 24h/day, a distance of = 10 mm must be complied with between the modules or to the neighboring switching components. | | | | | | | |

Interface Technology - Microcompact Relay Module

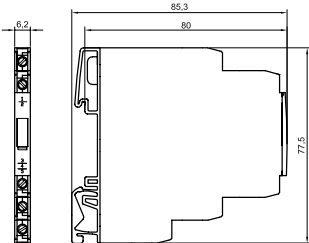
AC/DC-Relay-Interface, 1 Relay with 1 CO contact

AC/DC 250 V, 6 A, 1500 VA

Spring terminal, contact material: AgSnO₂



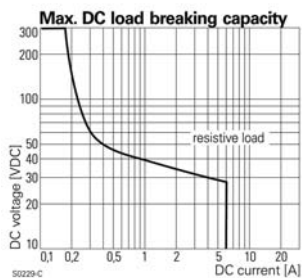
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|--|--|-----------------------|-----------------------|--------------------|
| Screw terminal | | | | |
| Rated voltage | DC 12 V | 760020 | RE 6-0020 DC 12 V | 4 |
| | AC/DC 24 V | 760022 | RE 6-0022 AC/DC 24 V | 4 |
| | AC/DC 110 V | 760026 | RE 6-0026 AC/DC 110 V | 4 |
| | AC/DC 230 V | 760027 | RE 6-0027 AC/DC 230 V | 4 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 761022 | RE 6-1022 AC/DC 24 V | 4 |
| | AC/DC 110 V | 761026 | RE 6-1026 AC/DC 110 V | 4 |
| | AC/DC 230 V | 761027 | RE 6-1027 AC/DC 230 V | 4 |
| Input | | | | |
| | DC 12 V | AC/DC 24 V | AC/DC 110 V | AC/DC 230 V |
| Input voltage range | 9.6 – 15.0 V | 19.2 – 30.0 V | 77.0 – 137.5 V | 184.0 – 253.0 V |
| Rated current | 16.0 mA | 22.0 mA | 7.0 mA | 3.5 mA |
| Interrupting voltage | <1.5 V | <2.4 V | 11 V | <23 V |
| Protection device | Bridge rectifier | | | |
| Rated insulation voltage (EN 50178) | 50 V | | 150 V | 300 V |
| Max. length of connecting lead | – | | | |
| Status indication | LED yellow | | | |
| Rated frequency | – | | | 50–60 Hz |
| Output | | | | |
| Contact type | 1 change over contact | | | |
| Min. switching voltage | AC/DC 17 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 5 mA | | | |
| Max. switching current | AC/DC 6 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1500 VA | | | |
| Contact material | AgSnO ₂ | | | |
| Mechanical service life | > 5 x 10 ⁷ operations | | | |
| Switch-on delay | 5 ms | | | 10 ms |
| Switch-off delay | 5 ms | 10 ms | | 15 ms |
| Clearance/creep. dist. (control/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | |
| Inrush current | 16 A, 4 ms | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 6.2 x 80.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.025 | | | |
| Approvals | cULus | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |
| Comments | | | | |
| For operation with rated voltage and 100% ED over 24h/day, a distance of = 10 mm must be complied with between the modules or to the neighboring switching components. | | | | |

Interface Technology - Microcompact Relay Module

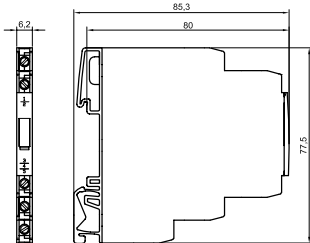
AC/DC-Relay-Interface, 1 Relay with 1 CO contact

AC/DC 250 V, 6 A, 1500 VA

Spring terminal, contact material: AgSnO₂ + 5 µm HV



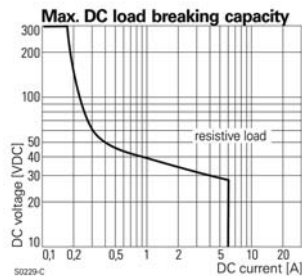
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|--|--|-----------------------|---------------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 760222 | RE 6-0222 HTV AC/DC 24 V | 4 |
| | AC/DC 110 V | 760226 | RE 6-0226 HTV AC/DC 110 V | 4 |
| | AC/DC 230 V | 760227 | RE 6-0227 HTV AC/DC 230 V | 4 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 761222 | RE 6-1222 HTV AC/DC 24 V | 4 |
| | AC/DC 110 V | 761226 | RE 6-1226 HTV AC/DC 110 V | 4 |
| | AC/DC 230 V | 761227 | RE 6-1227 HTV AC/DC 230 V | 4 |
| Input | | | | |
| | AC/DC 24 V | AC/DC 110 V | AC/DC 230 V | |
| Input voltage range | 19.2 – 30.0 V | 77.0 – 137.5 V | 184.0 – 253.0 V | |
| Rated current | 22.0 mA | 7.0 mA | 3.5 mA | |
| Interrupting voltage | <2.4 V | <11 V | <23 V | |
| Protection device | Bridge rectifier | | | |
| Rated insulation voltage (EN 50178) | 50 V | 150 V | 300 V | |
| Max. length of connecting lead | – | | | |
| Status indication | LED yellow | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Contact type | 1 change over contact | | | |
| Min. switching voltage | AC/DC 1 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 1 mA | | | |
| Max. switching current | AC/DC 6 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1500 VA | | | |
| Contact material | AgSnO ₂ + 5 µm HV | | | |
| Mechanical service life | > 5 x 10 ⁷ operations | | | |
| Switch-on delay | 5 ms | | 10 ms | |
| Switch-off delay | 10 ms | | 15 ms | |
| Clearance/creep. dist. (cont./load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | |
| Inrush current | 16 A, 4 ms | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 6.2 x 80.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.025 | | | |
| Approvals | cULus | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4,23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Comments

Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact. For operation with rated voltage and 100% ED over 24h/day, a distance of = 10 mm must be complied with between the modules or to the neighboring switching components.

Interface Technology - Microcompact Relay Module

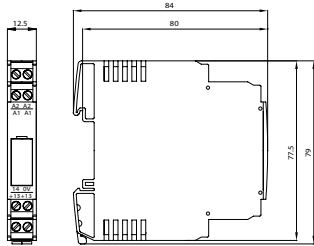
AC/DC Relay-Module, 2 Relay with 1 N/O contact

AC/DC 250 V, 6 A, 1500 VA

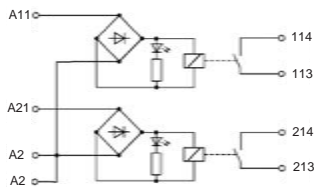
Spring terminal, contact material: AgSnO₂



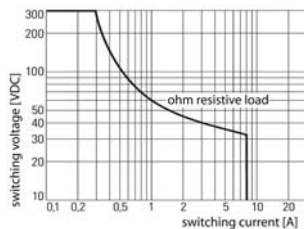
Dimensions



PIN assignment



Limit curve



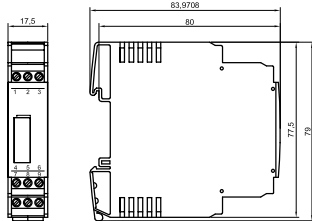
| Description | Part-No. | Type | PU | |
|---|--|-----------------------|----------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 760052 | RE 6-0052 AC/DC 24 V | |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 761052 | RE 6-1052 AC/DC 24 V | |
| Input | | | | |
| AC/DC 24 V | | | | |
| Input voltage range | 19.2 – 30.0 V | | | |
| Rated current | 12.0 mA | | | |
| Interrupting voltage | <2.4 V | | | |
| Protection device | Bridge rectifier | | | |
| Rated insulation voltage (EN 50178) | 50 V | | | |
| Max. length of connecting lead | – | | | |
| Status indication | LED yellow | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Contact type | 2 N/O contact | | | |
| Min. switching voltage | AC/DC 17 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 5 mA | | | |
| Max. switching current | AC/DC 6 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1500 VA | | | |
| Contact material | AgSnO ₂ | | | |
| Mechanical service life | 2 x 10 ⁷ operations | | | |
| Switch-on delay | 5 ms | | | |
| Switch-off delay | 15 ms | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | |
| Inrush current | 16 A (4 ms) | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 12.5 x 80.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.053 | | | |
| Approvals | cULus | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 7x20 mm | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 | 1 |

Interface Technology - Microcompact Relay Module

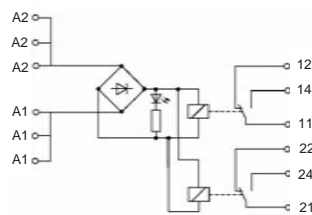
AC/DC-Relay-Interface, 2 Relay with 1 CO contact
AC/DC 250 V, 6 A, 1500 VA
spring terminal, contact material: AgSnO₂



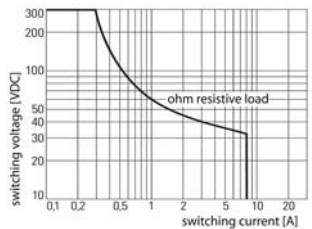
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|---|--|-----------------------|----------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 760042 | RE 6-0042 AC/DC 24 V | |
| Spring terminal | | | | |
| Rated voltage | AC/DC 24 V | 761042 | RE 6-1042 AC/DC 24 V | |
| Input | | | | |
| AC/DC 24 V | | | | |
| Input voltage range | 19.2 – 30.0 V | | | |
| Rated current | 24.0 mA | | | |
| Interrupting voltage | <2.4 V | | | |
| Protection device | Bridge rectifier | | | |
| Rated insulation voltage (EN 50178) | 50 V | | | |
| Max. length of connecting lead | – | | | |
| Status indication | LED yellow | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Contact type | 2 change over contact | | | |
| Min. switching voltage | AC/DC 17 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 5 mA | | | |
| Max. switching current | AC/DC 6 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1500 VA | | | |
| Contact material | AgSnO ₂ | | | |
| Mechanical service life | 2 x 10 ⁷ operations | | | |
| Switch-on delay | 8 ms | | | |
| Switch-off delay | 15 ms | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 250 V | | | |
| Inrush current | 16 A (4 ms) | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | Yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 17.5 x 80.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.068 | | | |
| Approvals | – | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 7x20 mm | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 | 1 |

Interface Technology - Microcompact Relay Module

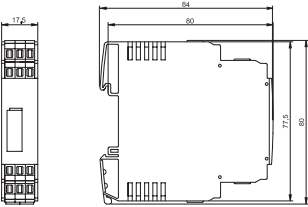
DC-Relay-Interface, 2 Relay, 1 CO contact

AC/DC 250 V, 6 A, 1500 VA

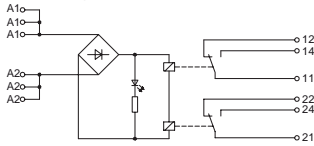
spring terminal, contact material: AgNi + 0.15 µm HV



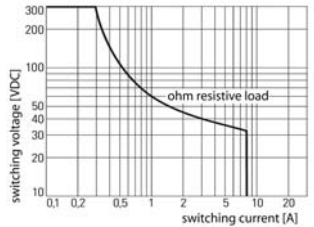
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU |
|---|--|-----------------------|------------------------|
| Spring terminal | | | |
| Rated voltage | DC 110 V | 762012 | RE 6-2012 HTV DC 110 V |
| Input | | | |
| DC 110 V | | | |
| Input voltage range | 77.0 – 137.5 | | |
| Rated current | 10.0 mA | | |
| Interrupting voltage | <11 V | | |
| Protection device | Bridge rectifier | | |
| Rated insulation voltage (EN 50178) | 300 V | | |
| Max. length of connecting lead | – | | |
| Status indication | LED yellow | | |
| Rated frequency | – | | |
| Output | | | |
| Contact type | 2 change over contact | | |
| Min. switching voltage | AC/DC 1 V | | |
| Max. switching voltage | AC/DC 250 V | | |
| Min. switching current | AC/DC 1 mA | | |
| Max. switching current | AC/DC 6 A | | |
| Switching capacity AC 15 | 3 A | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | |
| Max. switching capacity | 1500 VA | | |
| Contact material | AgNi + 0.15 µm HV | | |
| Mechanical service life | 2 x 10 ⁷ operations | | |
| Switch-on delay | appr. 8 ms | | |
| Switch-off delay | appr. 15 ms | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | |
| Rated insulation voltage (EN 50178) | 250 V | | |
| Inrush current | 15 A (4 ms) | | |
| General | | | |
| Housing material | PPE | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | Yes | | |
| Operation temperature range | -25 °C – 70 °C | | |
| Storage temperature range | -25 °C – 80 °C | | |
| Dimensions (w x h x d) | 17.5 x 80.0 x 84.0 mm | | |
| Weight (kg/piece) | 0.068 | | |
| Approvals | – | | |
| Termination | Spring terminal 0.25–2.5 mm ² | | |
| Accessories | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| tag holder 7x20 mm | white | 681311 | BZT 0720 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 |
| Comments | | | |
| Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact. | | | |

Interface Technology - Microcompact Relay Module

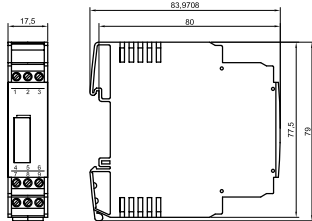
DC-Relay-Interface, 2 Relay, 1 CO contact

AC/DC 250 V, 6 A, 1500 VA

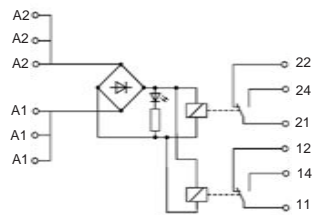
Screw-/spring terminal, contact material: AgNi + 0.15 µm HV



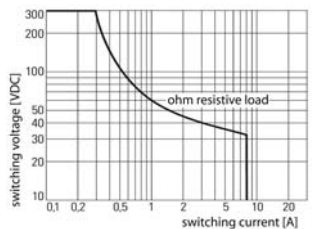
Dimensions



PIN assignment



Limit curve



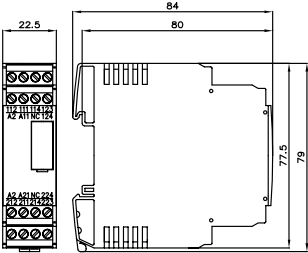
| Description | Part-No. | Type | PU |
|---|--|-----------------------|-----------------------|
| Screw terminal | | | |
| Rated voltage | DC 24 V | 762018 | RE 6-2018 HTV DC 24 V |
| Spring terminal | | | |
| Rated voltage | DC 24 V | 762002 | RE 6-2002 HTV DC 24 V |
| Input | | | |
| | | DC 24 V | |
| Input voltage range | 16.8 – 30.0 | | |
| Rated current | 35.0 mA | | |
| Interrupting voltage | <2.4 V | | |
| Protection device | Bridge rectifier | | |
| Rated insulation voltage (EN 50178) | 50 V | | |
| Max. length of connecting lead | - | | |
| Status indication | LED yellow | | |
| Rated frequency | - | | |
| Output | | | |
| Contact type | 2 change over contact | | |
| Min. switching voltage | AC/DC 1 V | | |
| Max. switching voltage | AC/DC 250 V | | |
| Min. switching current | AC/DC 1 mA | | |
| Max. switching current | AC/DC 6 A | | |
| Switching capacity AC 15 | 3 A | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | |
| Max. switching capacity | 1500 VA | | |
| Contact material | AgNi + 0.15 µm HV | | |
| Mechanical service life | 2 x 10 ⁷ operations | | |
| Switch-on delay | appr. 8 ms | | |
| Switch-off delay | appr. 15 ms | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | |
| Rated insulation voltage (EN 50178) | 250 V | | |
| Inrush current | 15 A (4 ms) | | |
| General | | | |
| Housing material | PPE | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | Yes | | |
| Operation temperature range | -25 °C – 70 °C | | |
| Storage temperature range | -25 °C – 80 °C | | |
| Dimensions (w x h x d) | 17.5 x 80.0 x 84.0 mm | | |
| Weight (kg/piece) | 0.068 | | |
| Approvals | - | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | |
| Accesories | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| tag holder 7x20 mm | white | 681311 | BZT 0720 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 |
| Comments | | | |
| Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact. | | | |

Interface Technology - Microcompact Relay Module

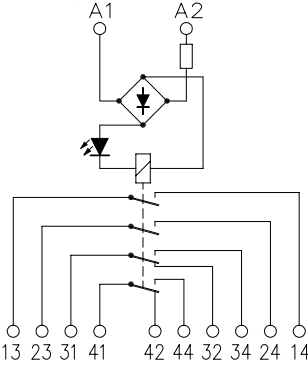
AC/DC Relay-Module, 1 Relay with 2 CO- / 2 NO contact
AC/DC 250 V, 6 A, 1500 VA
screw terminal, contact material: AgNi 90/10



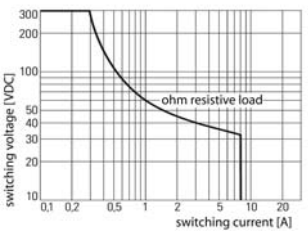
Dimensions



PIN assignment



Limit curve



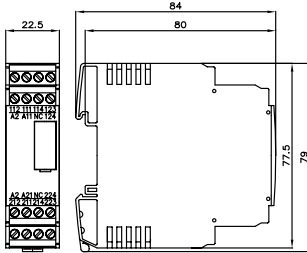
| Description | Part-No. | Type | PU | |
|---|--|-------------------|----------------------|-----|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 760751 | RE 6-0751 AC/DC 24 V | |
| Input | | | | |
| | | AC/DC 24 V | | |
| Input voltage range | 20.8 – 30.0 V | | | |
| Rated current | 36.0 mA | | | |
| Interrupting voltage | <2.4 V | | | |
| Protection device | Bridge rectifier | | | |
| Rated insulation voltage (EN 50178) | 50 V | | | |
| Max. length of connecting lead | – | | | |
| Status indication | LED yellow | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Contact type | 2 change over contact / 2 N/O contact | | | |
| Min. switching voltage | AC/DC 17 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 5 mA | | | |
| Max. switching current | AC/DC 6 A | | | |
| Switching capacity AC 15 | 2 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1500 VA | | | |
| Contact material | AgNi 90/10 | | | |
| Mechanical service life | 3 x 10 ⁷ operations | | | |
| Switch-on delay | 8 ms | | | |
| Switch-off delay | 15 ms | | | |
| Clearance/creep. dist. (contol/load side) | 2.2 mm | | | |
| Rated insulation voltage (EN 50178) | 320 V | | | |
| Inrush current | – | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 2.5 kV _{eff} | | | |
| Safe isolation | No | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 22.5 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.089 | | | |
| Approvals | – | | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | | |
| Accessories | | | | |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 7x20 mm | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 | 1 |

Interface Technology - Microcompact Relay Module

**AC/DC Relay-Module, 2 Relay with 1 CO- /1 NO contact or 1 CO
AC/DC 250 V, 6 A, 1500 VA
screw terminal, contact material: AgNi 90/10**

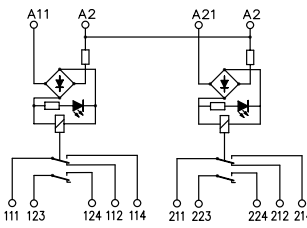


Dimensions

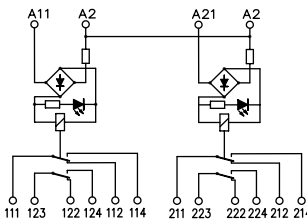


PIN assignment

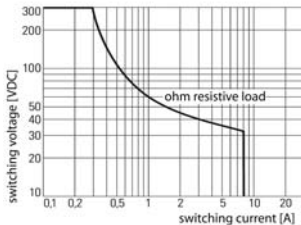
760752



760753



Limit curve



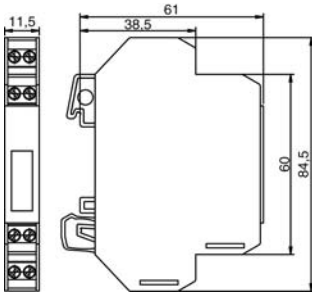
| Description | Part-No. | Type | PU |
|---|--|---------------------------|----------------------------|
| 2 change over- / 2 normally open contact | | | |
| Rated voltage | AC/DC 24 V | 760752 | RE 6-0752 AC/DC 24 V 2W/2S |
| 2 x 2 change over contact | | | |
| Rated voltage | AC/DC 24 V | 760753 | RE 6-0753 AC/DC 24 V 2/2W |
| Input | | | |
| | 760752 | 760753 | |
| Input voltage range | 16.8 – 30.0 V | | |
| Rated current | 36.0 mA | | |
| Interrupting voltage | – | | |
| Protection device | Bridge rectifier | | |
| Rated insulation voltage (EN 50178) | 320 V | | |
| Max. length of connecting lead | – | | |
| Status indication | LED yellow | | |
| Rated frequency | 50–60 Hz | | |
| Output | | | |
| Contact type | 2 change over- / 2 normally open contact | 2 x 2 change over contact | |
| Min. switching voltage | AC/DC 17 V | | |
| Max. switching voltage | AC/DC 250 V | | |
| Min. switching current | AC/DC 5 mA | | |
| Max. switching current | AC/DC 6 A | | |
| Switching capacity AC 15 | – A | | |
| Switching capacity DC 13 | – | | |
| Max. switching capacity | 1500 VA | | |
| Contact material | AgNi 90/10 | | |
| Mechanical service life | 3 x 10 ⁷ operations | | |
| Switch-on delay | 8 ms | | |
| Switch-off delay | 15 ms | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | |
| Rated insulation voltage (EN 50178) | 320 V | | |
| Inrush current | 15 A (4 ms) | | |
| General | | | |
| Housing material | PPE | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | Yes | | |
| Operation temperature range | -25 °C – 55 °C | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 22.5 x 79.0 x 84.0 mm | | |
| Weight (kg/piece) | 0.089 | | |
| Approvals | – | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | |
| Accesories | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| tag holder 7x20 mm | white | 681311 | BZT 0720 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 |
| | | | Pkg. units |
| | | | 5 |
| | | | 100 |
| | | | 1 |
| | | | 1 |

Interface Technology - Minicompact Relay Module

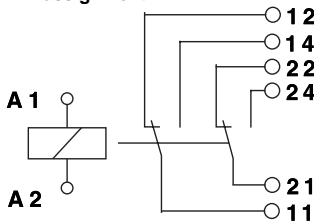
AC/DC-Relay-Interface,1 Relay with 2 CO contact
AC/DC 250 V, 6 A, 1500 VA
screw terminal, contact material: AgNi 90/10



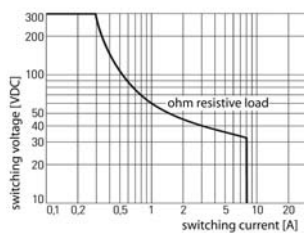
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|---|--|-----------------------|----------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 24 V | 730753 | RE 4-0753 AC/DC 24 V | |
| Input | | | | |
| AC/DC 24 V | | | | |
| Input voltage range | 16.8 – 30.0 V | | | |
| Rated current | 23.0 mA | | | |
| Interrupting voltage | <2.4 V | | | |
| Protection device | Bridge rectifier | | | |
| Rated insulation voltage (EN 50178) | 50 V | | | |
| Max. length of connecting lead | – | | | |
| Status indication | LED yellow | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Contact type | 2 change over contact | | | |
| Min. switching voltage | AC/DC 1 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 1 mA | | | |
| Max. switching current | AC/DC 6 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1500 VA | | | |
| Contact material | AgNi + 0.15 µm HV | | | |
| Mechanical service life | 20 x 10 ⁶ operations | | | |
| Switch-on delay | 5 ms | | | |
| Switch-off delay | 15 ms | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 250 V | | | |
| Inrush current | 30 A (4 ms) | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | Yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | 40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 22.5 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.089 | | | |
| Approvals | cULus | | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 7x20 mm | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 | 1 |

Comments

Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Minicompact Relay Module

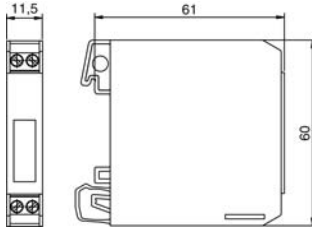
AC/DC Relay-Module, 1 Relay with 1 N/O contact

AC/DC 250 V, 5 A, 1250 VA

Screw terminal, Contact material: AgSnO₂ + 0.15 µm HV

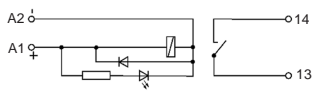


Dimensions

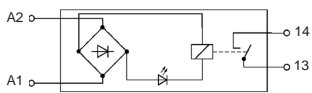


PIN assignment

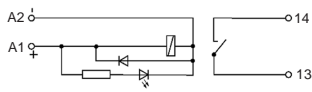
AC/DC 24 V



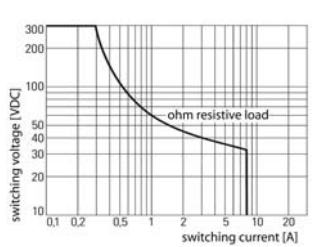
AC/DC 110 V, AC/DC 230 V



AC/DC 24 V HV



Limit curve



| Description | Part-No. | Type | PU | |
|--|--|--------------------------|-------------------------|----------------------|
| Relay Module with AgSnO₂ | | | | |
| Rated voltage | AC/DC 24 V 730711 | RE 4-0711 AC/DC 24 V | 5 | |
| | AC/DC 110 V 730716 | RE 4-0716 AC/DC 115 V | 20 | |
| | AC/DC 230 V 730717 | RE 4-0717 AC/DC 230 V | 5 | |
| Relay Module with AgNi + 0.15µm HV | | | | |
| Rated voltage | AC/DC 24 V HV 730841 | RE 4-0841 HTV AC/DC 24 V | 5 | |
| Input | | | | |
| | AC/DC 24 V | AC/DC 110 V | AC/DC 230 V | AC/DC 24 V HV |
| Input voltage range | 19.7 – 30.0 V | 88.0 – 125.0 V | 187.0 – 242.0 V | 19.2 – 30.0 V |
| Rated current | 20.0 mA | 5.0 mA | 5.0 mA | 12.0 mA |
| Interrupting voltage | <2.4 V | 11 V/11 V | <23 V | <2.4 V |
| Protection device | Bridge rectifier | | | |
| Rated insulation voltage (EN 50178) | 50 V | 150 V | 250 V | 50 V |
| Max. length of connecting lead | – | | | |
| Status indication | LED yellow | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Contact type | N/O contact | | | |
| Min. switching voltage | AC/DC 17 V | | AC/DC 1 V | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 5 mA | | AC/DC 1 mA | |
| Max. switching current | AC/DC 5 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1250 VA | | | |
| Contact material | AgSnO ₂ | AgSnO ₂ | AgNi; AgNi + 0.15 µm HV | |
| Mechanical service life | 3 × 10 ⁷ operations | | | |
| Switch-on delay | 8 ms | | 7 ms | |
| Switch-off delay | 4 ms | | 3 ms | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | |
| Inrush current | 15 A (4 ms) | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | Yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w × h × d) | 11.5 × 60.0 × 67.0 mm | | | |
| Weight (kg/piece) | 0.035 | | | |
| Approvals | cULus, VW approval | | cULus | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 9x20 mm | white | 681315 | BZT 0920 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 9 x 20 mm (Sheet with 270 labels) | | 681032 | LEB-0924 | 1 |

Comments

Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Minicompact Relay Module

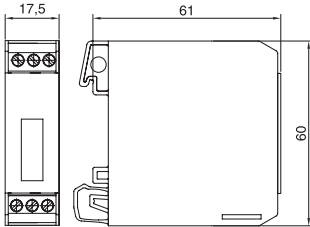
AC/DC-Relay-Interface, 1 Relay with 1 CO contact

AC/DC 250 V, 5 A, 1250 VA

Screw terminal, Contact material: AgSnO₂, AgNi + 0.15 µm HV

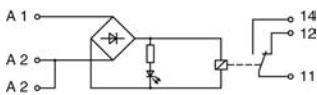


Dimensions

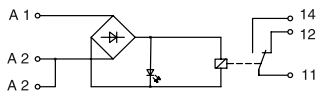


PIN assignment

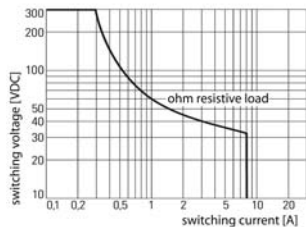
AC/DC 24 V HV, AC/DC 24 V



AC/DC 230 V



Limit curve



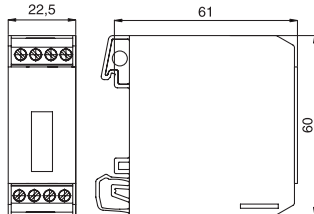
| Description | Part-No. | Type | PU |
|--|--|-----------------------|--------------------------------|
| AgSnO₂ | | | |
| Rated voltage | AC/DC 24 V | 730732 | RE 4-0732 AC/DC 24 V |
| | AC/DC 230 V | 731737 | RE 4-7137 AC/DC 230 V |
| AgNi + 0.15 µm HV | | | |
| Rated voltage | AC/DC 24 V HV | 730842 | RE 4-0842 HTV AC/DC 24 V |
| Input | | | |
| | AC/DC 24 V HV | AC/DC 24 V | AC/DC 230 V |
| Input voltage range | 19.2 – 30.0 V | | 187.0 – 242.0 V |
| Rated current | 12.0 mA | 20.0 mA | 5.0 mA |
| Interrupting voltage | <2.4 V | | <23 V |
| Protection device | Bridge rectifier | | |
| Rated insulation voltage (EN 50178) | 50 V | | 250 V |
| Max. length of connecting lead | – | | |
| Status indication | LED yellow | | |
| Rated frequency | 50–60 Hz | | |
| Output | | | |
| Contact type | 1 change over contact | | |
| Min. switching voltage | AC/DC 1 V | | AC/DC 17 V |
| Max. switching voltage | | AC/DC 250 V | |
| Min. switching current | AC/DC 1 mA | | AC/DC 5 mA |
| Max. switching current | | AC/DC 5 A | |
| Switching capacity AC 15 | | 3 A | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | |
| Max. switching capacity | 1250 VA | | |
| Contact material | AgNi + 0.15 µm HV | | AgSnO ₂ |
| Mechanical service life | 2 x 10 ⁷ operations | | 3 x 10 ⁷ operations |
| Switch-on delay | 7 ms | | 8 ms |
| Switch-off delay | 3 ms | | 4 ms |
| Clearance/creep. dist. (control/load side) | >5.5 mm | | |
| Rated insulation voltage (EN 50178) | 300 V | | |
| Inrush current | 15 A (4 ms) | | |
| General | | | |
| Housing material | PPE | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | Yes | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 17.5 x 60.0 x 67.0 mm | | |
| Weight (kg/piece) | 0.045 | | |
| Approvals | UL, CSA | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | |
| Accessories | | | |
| | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| tag holder 9x20 mm | white | 681315 | BZT 0920 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 |
| Labels for laser printer 9 x 20 mm (Sheet with 270 labels) | | 681032 | LEB-0924 |
| | | | Pkg. units |

Interface Technology - Minicompact Relay Module

AC/DC-Relay-Interface, 1 Relay with 2 CO contact
AC/DC 250 V, 5 A, 1250 VA
screw terminal, contact material: AgNi 90/10

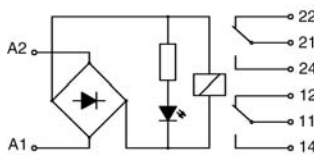


Dimensions

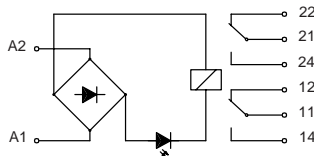


PIN assignment

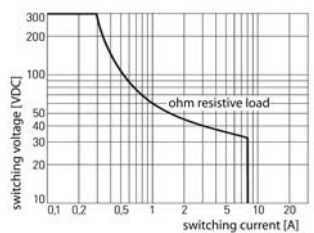
AC/DC 24 V



AC/DC 110 V, AC/DC 230 V



Limit curve



| Description | Part-No. | Type | PU | |
|--|--|-----------------------|-----------------------|-------------------|
| AgNi 90/10 | | | | |
| Rated voltage | AC/DC 24 V | 730741 | RE-4-0741 AC/DC 24 V | 5 |
| | AC/DC 110 V | 730746 | RE4-0746 AC/DC 110 V | 5 |
| | AC/DC 230 V | 730747 | RE 4-0747 AC/DC 230 V | 5 |
| Input | | | | |
| | AC/DC 24 V | AC/DC 110 V | AC/DC 230 V | |
| Input voltage range | 20.4 – 30.0 V | 88.0 – 125.0 V | 184.0 – 253.0 V | |
| Rated current | 22.0 mA | | 4.0 mA | |
| Interrupting voltage | <2.4 V | <11 V | <23 V | |
| Protection device | Bridge rectifier | | | |
| Rated insulation voltage (EN 50178) | 50 V | 150 V | 300 V | |
| Max. length of connecting lead | – | | | |
| Status indication | LED yellow | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Contact type | 2 change over contact | | | |
| Min. switching voltage | AC/DC 17 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 5 mA | | | |
| Max. switching current | AC/DC 5 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1250 VA | | | |
| Contact material | AgNi 90/10 | | | |
| Mechanical service life | 2 x 10 ⁷ operations | | | |
| Switch-on delay | 8 ms | | | |
| Switch-off delay | 3 ms | | | |
| Clearance/creep. dist. (contol/load side) | 2 mm | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | |
| Inrush current | 15 A (4 ms) | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 2.5 kV _{eff} | | | |
| Safe isolation | No | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 22.5 x 60.0 x 67.0 mm | | | |
| Weight (kg/piece) | 0.055 | | | |
| Approvals | – | | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | | |
| Accesories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 9x20 mm | white | 681315 | BZT 0920 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 9 x 20 mm (Sheet with 270 labels) | | 681032 | LEB-0924 | 1 |

Interface Technology - Varioprint Relay Module

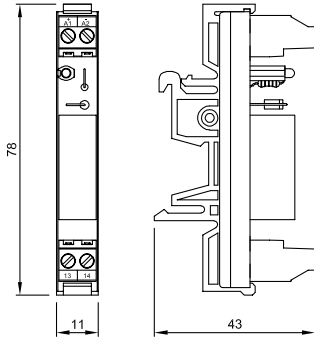
AC/DC Relay-Module, 1 Relay with 1 N/O contact

AC/DC 250 V, 5 A, 1250 VA

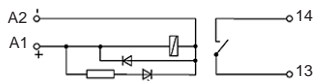
screw terminal, contact material: AgNi + 0.15 µm HV



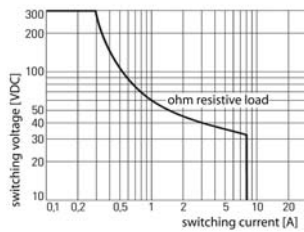
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU |
|---|--|--------|------------------|
| Screw terminal | | | |
| Rated voltage | DC 24 V | 710783 | RPE 0783 DC 24 V |
| Input | | | |
| DC 24 V | | | |
| Input voltage range | 19.2 – 30.0 V | | |
| Rated current | 23.0 mA | | |
| Interrupting voltage | – | | |
| Protection device | overload diode | | |
| Rated insulation voltage (EN 50178) | 50 V | | |
| Max. length of connecting lead | – | | |
| Status indication | LED green | | |
| Rated frequency | – | | |
| Output | | | |
| Contact type | N/O contact | | |
| Min. switching voltage | AC/DC 17 V | | |
| Max. switching voltage | AC/DC 250 V | | |
| Min. switching current | AC/DC 5 mA | | |
| Max. switching current | AC/DC 5 A | | |
| Switching capacity AC 15 | 3 A | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | |
| Max. switching capacity | 1250 VA | | |
| Contact material | AgNi + 0.15 µm HV | | |
| Mechanical service life | 2 x 10 ⁶ operations | | |
| Switch-on delay | 7 ms | | |
| Switch-off delay | 3 ms | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | |
| Rated insulation voltage (EN 50178) | 300 V | | |
| General | | | |
| Housing material | PPE | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | Yes | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 11.0 x 51.0 x 78.0 mm | | |
| Weight (kg/piece) | 0.028 | | |
| Approvals | – | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | |

Comments

Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Varioprint Relay Module

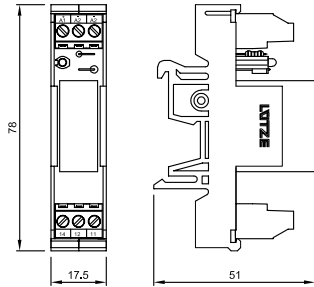
AC/DC Relay-Interface, 1 CO contact

AC/DC 250 V, 10 A, 2200 VA

Screw terminal, Contact material: AgSnO₂, AgNi

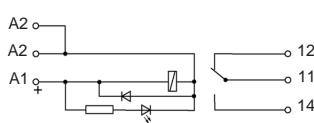


Dimensions

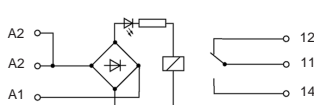


PIN assignment

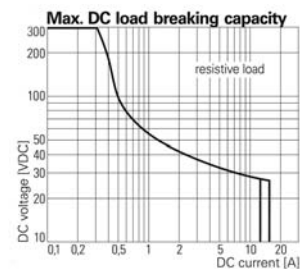
DC 24 V



AC/DC 230 V



Limit curve



| Description | Part-No. | Type | PU | |
|---|--------------------|--|-----------------------|-------------------|
| AgSnO₂ | | | | |
| Rated voltage | DC 24 V | 710751 | RPE-1E/1W DC 24 V | 5 |
| AgNi | | | | |
| Rated voltage | AC/DC 230 V | 710773 | RPE-1E/1W AC/DC 230 V | 5 |
| Input | | | | |
| | DC 24 V | | AC/DC 230 V | |
| Input voltage range | 19.7 – 30.0 V | | 184.0 – 253.0 V | |
| Rated current | 32.0 mA | | 5.0 mA | |
| Interrupting voltage | | – | | |
| Protection device | overload diode | | Bridge rectifier | |
| Rated insulation voltage (EN 50178) | 50 V | | 300 V | |
| Max. length of connecting lead | | – | | |
| Status indication | | LED green | | |
| Rated frequency | – | | 50–60 Hz | |
| Output | | | | |
| Contact type | | 1 change over contact | | |
| Min. switching voltage | AC/DC 24 V | | AC/DC 17 V | |
| Max. switching voltage | | AC/DC 250 V | | |
| Min. switching current | AC/DC 100 mA | | AC/DC 5 mA | |
| Max. switching current | | AC/DC 10 A | | |
| Switching capacity AC 15 | | 3 A | | |
| Switching capacity DC 13 | | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | |
| Max. switching capacity | | 2200 VA | | |
| Contact material | AgSnO ₂ | | AgNi | |
| Mechanical service life | | 3 x 10 ⁷ operations | | |
| Switch-on delay | | 10 ms | | |
| Switch-off delay | | 5 ms | | |
| Clearance/creep. dist. (contol/load side) | | 8 mm | | |
| Rated insulation voltage (EN 50178) | | 300 V | | |
| Inrush current | | 15 A (4 ms) | | |
| General | | | | |
| Housing material | | PPE | | |
| IP rating | | IP 20 | | |
| Field installation | | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | | 4.0 kV _{eff} | | |
| Safe isolation | | yes | | |
| Operation temperature range | | -25 °C – 60 °C | | |
| Storage temperature range | | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | | 17.5 x 77.0 x 57.0 mm | | |
| Weight (kg/piece) | | 0.048 | | |
| Approvals | | – | | |
| Termination | | Screw terminal: 0.25–2.5 mm ² | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Identifikation unit | transparent | 710799 | | 100 |

Interface Technology - Varioprint Relay Module

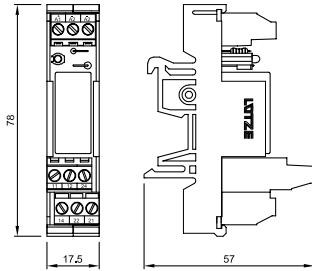
AC/DC Relay-Interface, 2 CO contact

AC/DC 250 V, 5 A, 1250 VA

screw terminal, contact material: AgNi + 0.15 µm HV

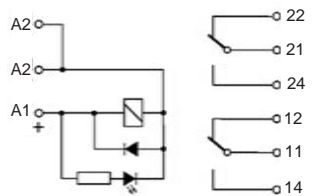


Dimensions

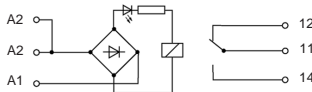


PIN assignment

DC 24 V, DC 24 V HV

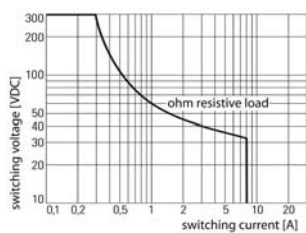


AC/DC 230 V HV

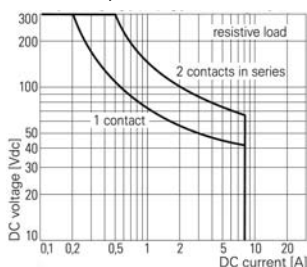


Limit curve

DC 24 V



DC 24 V HV, AC/DC 230 V HV



| Description | Part-No. | Type | PU | |
|---|----------------|--|----------------------------|---|
| AgNi | | | | |
| Rated voltage | DC 24 V | 710755 | RPE-1E2/2W DC 24 V | 5 |
| AgNi + 0.15 µm HV | | | | |
| Rated voltage | DC 24 V HV | 711755 | RPE-1E2/2W HTV DC 24 V | 2 |
| | AC/DC 230 V HV | 710775 | RPE-1E2/2W HTV AC/DC 230 V | 5 |
| Input | DC 24 V | DC 24 V HV | AC/DC 230 V HV | |
| Input voltage range | 19.2 – 30.0 V | | 184.0 – 253.0 V | |
| Rated current | 32.0 mA | | 6.0 mA | |
| Interrupting voltage | <2.4 V | | <23 V | |
| Protection device | overload diode | | Bridge rectifier | |
| Rated insulation voltage (EN 50178) | 50 V | | 300 V | |
| Max. length of connecting lead | | – | | |
| Status indication | | LED green | | |
| Rated frequency | | – | 50–60 Hz | |
| Output | | | | |
| Contact type | | 2 change over contact | | |
| Min. switching voltage | AC/DC 17 V | | AC/DC 1 V | |
| Max. switching voltage | | AC/DC 250 V | | |
| Min. switching current | AC/DC 5 mA | | AC/DC 1 mA | |
| Max. switching current | | AC/DC 5 A | | |
| Switching capacity AC 15 | | 3 A | | |
| Switching capacity DC 13 | | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | |
| Max. switching capacity | | 1250 VA | | |
| Contact material | AgNi | | AgNi + 0.15 µm HV | |
| Mechanical service life | | 2 x 10 ⁷ operations | | |
| Switch-on delay | 8 ms | 10 ms | 8 ms | |
| Switch-off delay | 3 ms | 5 ms | 3 ms | |
| Clearance/creep. dist. (contol/load side) | | – | | |
| Rated insulation voltage (EN 50178) | | 300 V | | |
| Inrush current | 7 A (4 ms) | 15 A (4 ms) | 7 A (4 ms) | |
| General | | | | |
| Housing material | | PPE | | |
| IP rating | | IP 20 | | |
| Field installation | | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | | 4.0 kV _{eff} | | |
| Safe isolation | | – | | |
| Operation temperature range | | -25 °C – 60 °C | | |
| Storage temperature range | | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | | 17.5 x 77.0 x 57.0 mm | | |
| Weight (kg/piece) | | 0.056 | | |
| Approvals | | – | | |
| Termination | | Screw terminal: 0.25–2.5 mm ² | | |

Comments

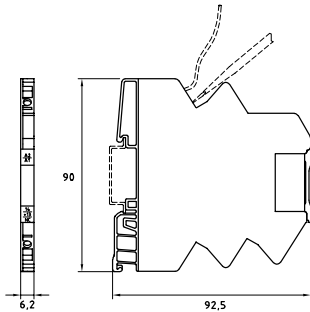
Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Microcompact Relay Module

AC/DC-Relay-Interface, 1, Relay with 1 CO contact, pluggable
AC/DC 250 V, 6 A, 1500 VA
Spring terminal, contact material: AgSnO₂

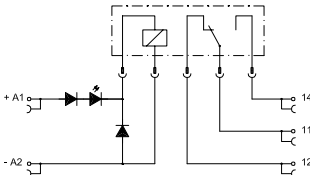


Dimensions

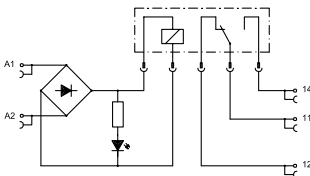


PIN assignment

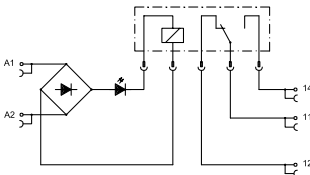
DC 12 V, DC 24 V



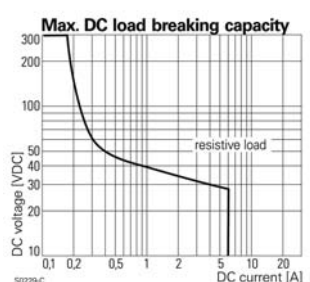
AC/DC 24 V



AC/DC 115 V, AC/DC 230 V



Limit curve



| Description | Part-No. | Type | PU | |
|------------------------|-------------|--------|-----------------------|---|
| Screw terminal | | | | |
| Rated voltage | DC 12 V | 760828 | RE 7-0828 DC 12V | 5 |
| | DC 24 V | 760821 | RE 7-0821 DC 24 V | 5 |
| | AC/DC 24 V | 760822 | RE 7-0822 AC/DC 24 V | 5 |
| | AC/DC 115 V | 760826 | RE 7-0826 AC/DC 115 V | 5 |
| | AC/DC 230 V | 760827 | RE 7-0827 AC/DC 230 V | 5 |
| Spring terminal | | | | |
| Rated voltage | DC 12 V | 761828 | RE 7-1828 DC 12V | 5 |
| | DC 24 V | 761821 | RE 7-1821 DC 24 V | 5 |
| | AC/DC 24 V | 761822 | RE 7-1822 AC/DC 24 V | 5 |
| | AC/DC 115 V | 761826 | RE 7-1826 AC/DC 115 V | 5 |
| | AC/DC 230 V | 761827 | RE 7-1827 AC/DC 230 V | 5 |

| Input | DC 12 V | DC 24 V | AC/DC 24 V | AC/DC 115 V | AC/DC 230 V |
|-------------------------------------|------------------|---------------|-------------------------|-----------------------|-----------------------|
| Input voltage range | 10.2 – 15.0 V | 20.4 – 30.0 V | 16.8 – 30.0 V | 92.0 – 126.5 V | 184.0 – 253.0 V |
| Rated current | 15.0 mA | 14.0 mA | 21.0 mA | 5.0 mA | |
| Interrupting voltage | < 2 V | | < 11 V | | |
| Protection device | Bridge rectifier | | Reverse diode | Bridge rectifier | |
| Rated insulation voltage (EN 50178) | 50 V | | 150 V | | 250 V |
| Max. length of connecting lead | 2000 m | | DC: 2000 m AC: 100 m | DC: 500 m AC: 70 m | DC: 500 m AC: 40 m |
| Status indication | LED yellow | | | | |
| Rated frequency | - | | 50–60 Hz | | |

| Output | | | | | |
|---|--|--|------|--|-------|
| Contact type | 1 change over contact | | | | |
| Min. switching voltage | AC/DC 17 V | | | | |
| Max. switching voltage | AC/DC 250 V | | | | |
| Min. switching current | AC/DC 5 mA | | | | |
| Max. switching current | AC/DC 6 A | | | | |
| Switching capacity AC 15 | 3 A | | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | | |
| Max. switching capacity | 1500 VA | | | | |
| Contact material | AgSnO ₂ | | | | |
| Mechanical service life | >5 x 10 ⁶ operations | | | | |
| Switch-on delay | 5 ms | | 7 ms | | 8 ms |
| Switch-off delay | 4 ms | | 7 ms | | 13 ms |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | | |

| General | | | | | |
|---------------------------------|--|--|--|--|--|
| Housing material | PPE | | | | |
| IP rating | IP 20 | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | | |
| Safe isolation | yes | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | |
| Weight (kg/piece) | 0.035 | | | | |
| Approvals | cULus | | | | |
| Termination | Screw-/spring terminal 0.5–1.5 mm ² | | | | |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|----------------|--------|--------|--------|--------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |

| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|------------------|------------|
| Replacement relay for 76X821 | | 768002 | Relay SNR 24V 1W | 20 |
| Replacement relay for 76X822 | | 768001 | Relay SNR 12V 1W | 20 |
| Replacement relay for 76X826 / 76X827 | | 768003 | Relay SNR 60V 1W | 20 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Comments
 For operation with rated voltage and 100% ED over 24h/day, a distance of = 10 mm must be complied with between the modules or to the neighboring switching components.

Interface Technology - Microcompact Relay Module

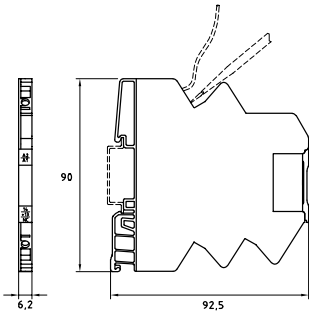
AC/DC-Relay-Interface, 1, Relay with 1 CO contact, pluggable

AC/DC 250 V, 6 A, 1500 VA

Screw-/spring terminal, contact material: AgSnO₂ + 5 µm HV

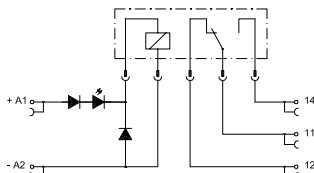


Dimensions

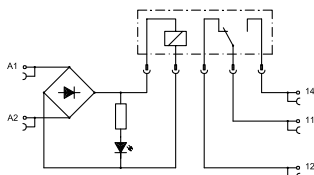


PIN assignment

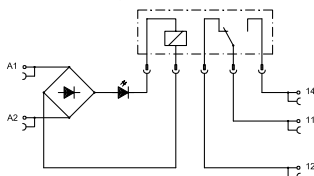
DC 24 V



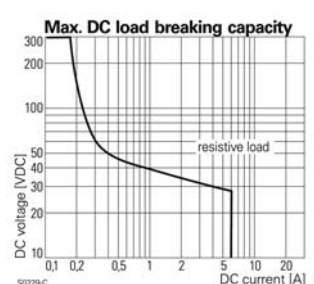
AC/DC 24 V



AC/DC 115 V, AC/DC 230 V



Limit curve



| Description | Part-No. | Type | PU | |
|------------------------|-------------|--------|---------------------------|---|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 760921 | RE 7-0921 HTV DC 24 V | 5 |
| | AC/DC 24 V | 760922 | RE 7-0922 HTV AC/DC 24 V | 5 |
| | AC/DC 115 V | 760926 | RE 7-0926 HTV AC/DC 115 V | 5 |
| | AC/DC 230 V | 760927 | RE 7-0927 HTV AC/DC 230 V | 5 |
| Spring terminal | | | | |
| Rated voltage | DC 24 V | 761921 | RE 7-1921 HTV DC 24 V | 5 |
| | AC/DC 24 V | 761922 | RE 7-1922 HTV AC/DC 24 V | 5 |
| | AC/DC 115 V | 761926 | RE 7-1926 HTV AC/DC 115 V | 5 |
| | AC/DC 230 V | 761927 | RE 7-1927 HTV AC/DC 230 V | 5 |

| Input | DC 24 V | AC/DC 24 V | AC/DC 115 V | AC/DC 230 V |
|-------------------------------------|----------------|-------------------------|-----------------------|-----------------|
| Input voltage range | 20.4 – 30.0 V | 16.8 – 30.0 V | 92.0 – 126.0 V | 184.0 – 253.0 V |
| Rated current | 14.0 mA | 21.0 mA | 5.0 mA | |
| Interrupting voltage | < 2.4 V | | <11 V | < 23 V |
| Protection device | Overload diode | | Bridge rectifier | |
| Rated insulation voltage (EN 50178) | 50 V | | 150 V | 250 V |
| Max. length of connecting lead | 2000 m | DC: 2000 m AC: 100 m | DC: 500 m AC: 70 m | 250 m |

| | | | | |
|-------------------|------------|--|--|--|
| Status indication | LED yellow | | | |
| Rated frequency | – | | | |
| Rated frequency | 50–60 Hz | | | |

| Output | | | | |
|---|--|------|--------------------------------|--|
| Contact type | 1 change over contact | | | |
| Min. switching voltage | AC/DC 1 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 1 mA | | | |
| Max. switching current | AC/DC 6 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1500 VA | | | |
| Contact material | AgSnO ₂ + 5 µm HV | | | |
| Mechanical service life | >5 x 10 ⁶ operations | | 5 x 10 ⁶ operations | |
| Switch-on delay | 5 ms | 7 ms | 8 ms | |
| Switch-off delay | 4 ms | 7 ms | 13 ms | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | |

| General | | | | |
|---------------------------------|--|--|--|--|
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | |
| Weight (kg/piece) | 0.035 | | | |
| Approvals | cULus | | | |
| Termination | Screw-/spring terminal 0.5–1.5 mm ² | | | |

| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
|----------------|--------|--------|--------|--------|--------|---------|------------|
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 10 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 10 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 10 |

| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|----------------------|------------|
| Replacement relay for 76X921 | | 768006 | Relay SNR 24V 1W HTV | 20 |
| Replacement relay for 76X922 | | 768005 | Relay SNR 12V 1W HTV | 20 |
| Replacement relay for 76X926 / 760927 | | 768007 | Relay SNR 60V 1W HTV | 20 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Isolation plate | | 760809 | TP 7-0809 | 5 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB 0411 | 1 |

Comments
 Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

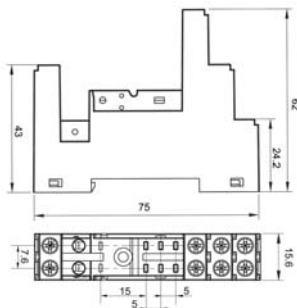
For operation with rated voltage and 100% ED over 24h/day, a distance of = 10 mm must be complied with between the modules or to the neighboring switching components.

Interface Technology - Microplug Relay Module

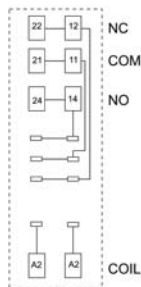
DC-Relay-Interface, 1 CO contact, pluggable
AC 400 V/DC 300 V, 16 A, 4000 VA
screw terminal, contact material: AgNi + 5 µm HV



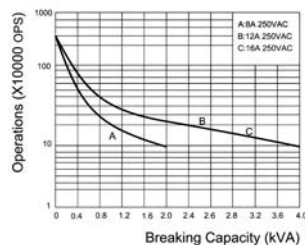
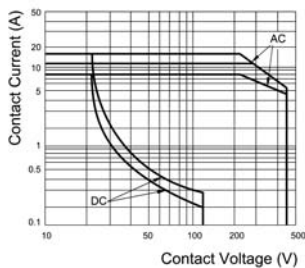
Dimensions



PIN assignment



Limit curve



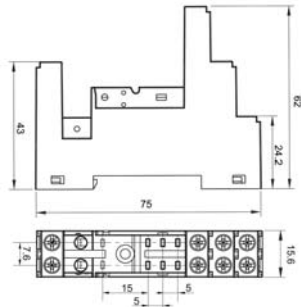
| Description | Part-No. | Type | PU | |
|---|----------------|--|--------------------------|-------------------|
| Relay Module with AgNi | | | | |
| Rated voltage | DC 12 V | 770140 | REP-0140 1W DC 12 V | 5 |
| | DC 24 V | 770141 | REP-0141 1W DC 24 V | 5 |
| | DC 115 V | 770146 | REP-0146 1W DC 115 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | DC 12 V | 770160 | REP-0160 1W HTV DC 12 V | 5 |
| | DC 24 V | 770161 | REP-0161 1W HTV DC 24 V | 5 |
| | DC 115 V | 770166 | REP-0166 1W HTV DC 115 V | 5 |
| Input | | | | |
| | DC 12 V | DC 24 V | DC 115 V | |
| Input voltage range | 8.4 – 18.0 V | 16.8 – 36.0 V | 77.0 – 165.0 V | |
| Rated current | 34.0 mA | 17.0 mA | 5.0 mA | |
| Rated voltage | DC 12 V | DC 24 V | DC 115 V | |
| Power consumption | | 0.40 W | | |
| Interrupting voltage | <1.2 V | <2.4 V | <11 V | |
| Protection device | | overload diode | | |
| Max. length of connecting lead | | – | | |
| Status indication | | LED green | | |
| Output | | | | |
| Contact type | | 1 change over contact | | |
| Min. switching voltage | | AC/DC 5 V | | |
| Max. switching voltage | | AC 400 V/ DC 300 V | | |
| Min. switching current | | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA | | |
| Max. switching current | | AC/DC 16 A | | |
| Switching capacity AC 15 | | 3.3 A | | |
| Switching capacity DC 13 | | at 24 V: 2 A; at 115 V: 300 mA; at 230 V: 150 mA | | |
| Max. switching capacity | | 4000 VA | | |
| Contact material | | AgNi or AgNi + 5 µm HV | | |
| Mechanical service life | | >1 × 10 ⁷ operations | | |
| Switch-on delay | | 15 ms | | |
| Switch-off delay | | 8 ms | | |
| Clearance/creep. dist. (contol/load side) | | Clearance distance: > 10 mm; creepage distance: > 10mm | | |
| Rated insulation voltage (EN 50178) | | AC 400 V (category C 250) | | |
| General | | | | |
| Housing material | | PA66+GF V0 (UL) | | |
| IP rating | | IP 20 | | |
| Field installation | | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | | 5.0 kV _{eff} | | |
| Safe isolation | | Yes | | |
| Operation temperature range | | -40 °C – 85 °C | | |
| Storage temperature range | | -40 °C – 85 °C | | |
| Dimensions (w x h x d) | | 15.9 x 78.1 x 66.5 mm | | |
| Weight (kg/piece) | | 0.062 | | |
| Approvals | | UL, CSA | | |
| Termination | | Screw terminal: 0.2–4.0 mm ² | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Relay socket | | 770900 | RES-0900 | 10 |
| Backup relay DC 12V | | 770100 | RE1W-0100 DC12 | 10 |
| Backup relay DC 12V HV | | 770120 | RE1WHV-0120 DC12 | 10 |
| Backup relay DC 24V | | 770101 | RE1W-0101 DC24 | 10 |
| Backup relay DC 24V HV | | 770121 | RE1WHV-0121 DC24 | 10 |
| Backup relay DC 110V | | 770106 | RE1W-0106 DC120 | 10 |
| Backup relay DC 110V HV | | 770126 | RE1WHV-0126 DC120 | 10 |
| Protecting module AC 6-24V | | 770911 | PM41G-0911 | 10 |
| Protecting module DC 110V | | 770916 | PM43G-0916 | 10 |
| Plate | | 770902 | REM-0902 | 10 |
| Jumper comb 10A | black | 770908 | REP-0908 | 10 |

Interface Technology - Microplug Relay Module

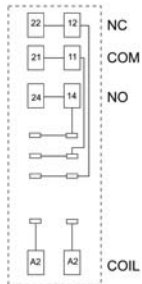
AC-Relay-Interface, 1 CO contact, pluggable
AC 400 V/DC 300 V, 16 A, 4000 VA
screw terminal, contact material: AgNi + 5 µm HV



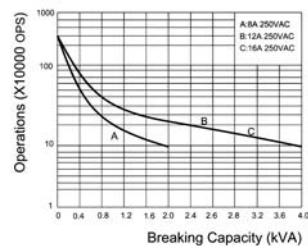
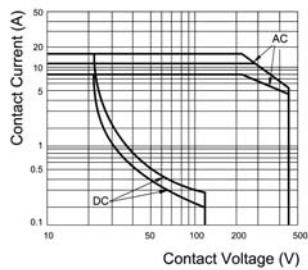
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|--|----------|--------|--------------------------|---|
| Relay Module with AgNi | | | | |
| Rated voltage | AC 12 V | 770150 | REP-0150 1W AC 12 V | 5 |
| | AC 24 V | 770151 | REP-0151 1W AC 24 V | 5 |
| | AC 120 V | 770156 | REP-0156 1W AC 120 V | 5 |
| | AC 230 V | 770157 | REP-0157 1W AC 230 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | AC 12 V | 770170 | REP-0170 1W HTV AC 12 V | 5 |
| | AC 24 V | 770171 | REP-0171 1W HTV AC 24 V | 5 |
| | AC 120 V | 770176 | REP-0176 1W HTV AC 120 V | 5 |
| | AC 230 V | 770177 | REP-0177 1W HTV AC 230 V | 5 |

| Input | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
|---|--|---------------|----------------|-----------------|
| Input voltage range | 9.6 – 14.0 V | 19.2 – 28.2 V | 96.0 – 144.0 V | 184.0 – 276.0 V |
| Rated current | 130.0 mA | 68.0 mA | 14.0 mA | 7.0 mA |
| Rated voltage | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
| Power consumption | 0.75 VA | | | |
| Interrupting voltage | <1.2 V | <3.6 V | <17.3 V | <34.5 V |
| Protection device | varistor | | | |
| Max. length of connecting lead | – | | | |
| Status indication | LED green | | | |
| Output | | | | |
| Contact type | 1 change over contact | | | |
| Min. switching voltage | AC/DC 5 V | | | |
| Max. switching voltage | AC 400 V / DC 300 V | | | |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA | | | |
| Max. switching current | AC/DC 16 A | | | |
| Switching capacity AC 15 | 3.3 A | | | |
| Switching capacity DC 13 | at 24 V: 2 A; at 115 V: 300 mA; at 230 V: 150 mA | | | |
| Max. switching capacity | 4000 VA | | | |
| Contact material | AgNi or AgNi + 5 µm HV | | | |
| Mechanical service life | >1 × 10 ⁷ operations | | | |
| Switch-on delay | 15 ms | | | |
| Switch-off delay | 5 ms | | | |
| Clearance/creep. dist. (contol/load side) | Clearance distance: > 10 mm; creepage distance: > 10mm | | | |
| Rated insulation voltage (EN 50178) | AC 400 V (category C 250) | | | |

| General | |
|---------------------------------|---|
| Housing material | PA66+GF V0 (UL) |
| IP rating | IP 20 |
| Field installation | rail TS 35 (EN 50022) |
| Insulation voltage input/output | 5.0 kV _{eff} |
| Safe isolation | Yes |
| Operation temperature range | -40 °C – 70 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 15.9 x 78.1 x 66.5 mm |
| Weight (kg/piece) | 0.062 |
| Approvals | UL, CSA |
| Termination | Screw terminal: 0.2–4.0 mm ² |

| Accessories | Colour | Article number | Type | Pkg. units |
|----------------------------------|--------|----------------|-------------------|------------|
| Relay socket | | 770900 | RES-0900 | 10 |
| Backup relay AC 12V | | 770110 | RE1W-0110 AC12 | 10 |
| Backup relay AC 12V HV | | 770130 | RE1WHV-0130 AC12 | 10 |
| Backup relay AC 24V | | 770111 | RE1W-0111 AC24 | 10 |
| Backup relay AC 24V HV | | 770131 | RE1WHV-0131 AC24 | 10 |
| Backup relay AC 110V | | 770116 | RE1W-0116 AC120 | 10 |
| Backup relay AC 110V HV | | 770136 | RE1WHV-0136 AC120 | 10 |
| Backup relay AC 230V | | 770117 | RE1W-0117 AC230 | 10 |
| Backup relay AC 230V HV | | 770137 | RE1WHV-0137 AC230 | 10 |
| Protecting module AC 6-24V | | 770913 | PM91G-0913 | 10 |
| Protecting module AC/DC 110-230V | | 770917 | PM93G-0917 | 10 |
| Plate | | 770902 | REM-0902 | 10 |
| Jumper comb 10A | black | 770908 | REP-0908 | 10 |

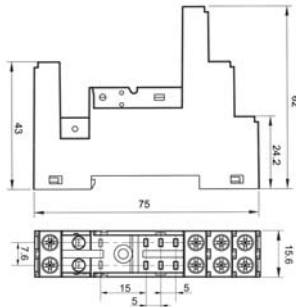
Comments
Part-No.
Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Microplug Relay Module

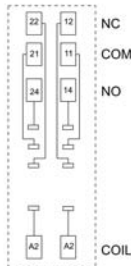
DC-Relay-Interface, 2 CO contact, pluggable
AC 400 V / DC 300 V, 8 A, 2000 VA
Screw terminal, Contact material: AgNi, AgNi 5 µm HV



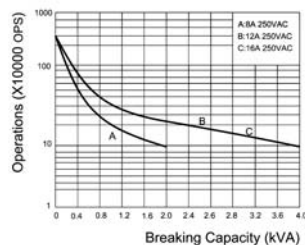
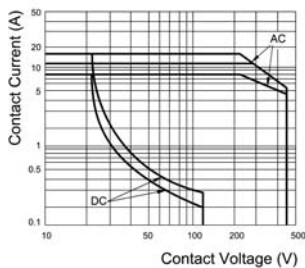
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|---|----------------|---|--------------------------|-------------------|
| Relay Module with AgNi | | | | |
| Rated voltage | DC 12 V | 770040 | REP-0040 2W DC 12 V | 5 |
| | DC 24 V | 770041 | REP-0041 2W DC 24 V | 5 |
| | DC 115 V | 770046 | REP-0046 2W DC 115 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | DC 12 V | 770240 | REP-0240 2W HTV DC 12 V | 5 |
| | DC 24 V | 770241 | REP-0241 2W HTV DC 24 V | 5 |
| | DC 115 V | 770246 | REP-0246 2W HTV DC 115 V | 5 |
| Input | | | | |
| | DC 12 V | DC 24 V | DC 115 V | |
| Input voltage range | 8.4 – 18.0 V | 16.8 – 31.2 V | 77.0 – 165.0 V | |
| Rated current | 34.0 mA | 16.0 mA | 4.0 mA | |
| Rated voltage | DC 12 V | DC 24 V | DC 115 V | |
| Power consumption | | 0.40 W | | |
| Interrupting voltage | <1.2 V | <2.4 V | <11 V | |
| Protection device | | Overload diode | | |
| Max. length of connecting lead | | – | | |
| Status indication | | LED green | | |
| Output | | | | |
| Contact type | | 2 change over contact | | |
| Min. switching voltage | | AC/DC 5 V | | |
| Max. switching voltage | | AC 400 V / DC 300 V | | |
| Min. switching current | | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA | | |
| Max. switching current | | AC/DC 8 A | | |
| Switching capacity AC 15 | | at 24 V: 3.1 A; at 230 V: 2 A | | |
| Switching capacity DC 13 | | at 24 V: 2A; at 115 V: 300 mA, at 230 V: 150 mA | | |
| Max. switching capacity | | 2000 VA | | |
| Contact material | | AgNi or AgNi + 5 µm HV | | |
| Mechanical service life | | >1 × 10 ⁷ operations | | |
| Switch-on delay | | 15 ms | | |
| Switch-off delay | | 5 ms | | |
| Clearance/creep. dist. (contol/load side) | | Clearance distance: >10 mm; Creepage distance: >10 mm | | |
| Rated insulation voltage (EN 50178) | | AC 400 V (category C 250) | | |
| General | | | | |
| Housing material | | PA66+GF V0 (UL) | | |
| IP rating | | IP 20 | | |
| Field installation | | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | | 5.0 kV _{eff} | | |
| Safe isolation | | yes | | |
| Operation temperature range | | -40 °C – 85 °C | | |
| Storage temperature range | | -40 °C – 85 °C | | |
| Dimensions (w x h x d) | | 15.9 x 78.1 x 67.0 mm | | |
| Weight (kg/piece) | | 0.062 | | |
| Approvals | | UL, CSA | | |
| Termination | | Screw terminal: 0.2–4.0 mm ² | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Relay socket | | 770900 | RES-0900 | 10 |
| Backup relay DC 12V | | 770918 | RE2W-0918 DC12 | 10 |
| Backup relay DC 12V HV | | 770919 | RE2WHV-0919 DC12 | 10 |
| Backup relay DC 24V | | 770920 | RE2W-0920 DC24 | 10 |
| Backup relay DC 24V HV | | 770921 | RE2WHV-0921 DC24 | 10 |
| Backup relay DC 110V | | 770922 | RE2W-0922 DC120 | 10 |
| Backup relay DC 110V HV | | 770923 | RE2WHV-0923 DC120 | 10 |
| Protecting module AC 6-24V | | 770911 | PM41G-0911 | 10 |
| Protecting module DC 110V | | 770916 | PM43G-0916 | 10 |
| Plate | | 770902 | REM-0902 | 10 |
| Jumper comb 10A | black | 770908 | REP-0908 | 10 |

Comments

Part-No. 770240–770246:

Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Microplug Relay Module

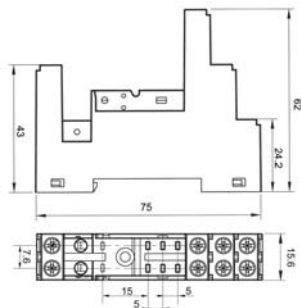
AC-Relay-Interface, 2 CO contact, pluggable

AC 400 V/DC 300 V, 8 A, 2000 VA

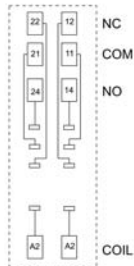
Screw terminal, Contact material: AgNi, AgNi + 5 µm HV



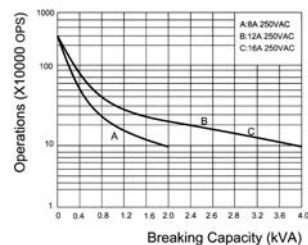
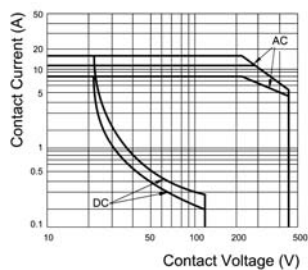
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|--|----------|--------|--------------------------|---|
| Relay Module with AgNi | | | | |
| Rated voltage | AC 12 V | 770050 | REP-0050 2W AC 12 V | 5 |
| | AC 24 V | 770051 | REP-0051 2W AC 24 V | 5 |
| | AC 120 V | 770056 | REP-0056 2W AC 120 V | 5 |
| | AC 230 V | 770047 | REP-0047 2W AC 230 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | AC 12 V | 770250 | REP-0250 2W HTV AC 12 V | 5 |
| | AC 24 V | 770251 | REP-0251 2W HTV AC 24 V | 5 |
| | AC 120 V | 770256 | REP-0256 2W HTV AC 120 V | 5 |
| | AC 230 V | 770247 | REP-0247 2W HTV AC 230 V | 5 |

| Input | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
|---|---|---------------|----------------|-----------------|
| Input voltage range | 9.6 – 14.0 V | 19.2 – 28.2 V | 96.0 – 144.0 V | 184.0 – 276.0 V |
| Rated current | 130.0 mA | 68.0 mA | 14.0 mA | 7.0 mA |
| Rated voltage | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
| Power consumption | 0.75 VA | | | |
| Interrupting voltage | <1.2 V | <3.6V | <17.3 V | <34.5 V |
| Protection device | Varistor | | | |
| Max. length of connecting lead | – | | | |
| Status indication | LED green | | | |
| Output | | | | |
| Contact type | 2 change over contact | | | |
| Min. switching voltage | AC/DC 5 V | | | |
| Max. switching voltage | AC 400 V / DC 300 V | | | |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA | | | |
| Max. switching current | AC/DC 8 A | | | |
| Switching capacity AC 15 | at 24 V: 3.1 A; at 230 V: 2 A | | | |
| Switching capacity DC 13 | at 24 V: 2A; at 115 V: 300 mA, at 230 V: 150 mA | | | |
| Max. switching capacity | 2000 VA | | | |
| Contact material | AgNi or AgNi + 5 µm HV | | | |
| Mechanical service life | >1 × 10 ⁷ operations | | | |
| Switch-on delay | 15 ms | | | |
| Switch-off delay | 5 ms | | | |
| Clearance/creep. dist. (contol/load side) | Clearance distance: >10 mm; Creepage distance: >10 mm | | | |
| Rated insulation voltage (EN 50178) | AC 400 V (category C 250) | | | |

| | | | | |
|---------------------------------|---|--|--|--|
| General | | | | |
| Housing material | PA66+GF V0 (UL) | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 5.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -40 °C – 70 °C | | | |
| Storage temperature range | -40 °C – 85 °C | | | |
| Dimensions (w x h x d) | 15.9 x 78.1 x 66.5 mm | | | |
| Weight (kg/piece) | 0.062 | | | |
| Approvals | UL, CSA | | | |
| Termination | Screw terminal: 0.2–4.0 mm ² | | | |

| Accessories | Colour | Article number | Type | Pkg. units |
|----------------------------------|--------|----------------|-------------------|------------|
| Relay socket | | 770900 | RES-0900 | 10 |
| Backup relay AC 12V | | 770926 | RE2W-0926 AC12 | 10 |
| Backup relay AC 12V HV | | 770927 | RE2WHV-0927 AC12 | 10 |
| Backup relay AC 24V | | 770928 | RE2W-0928 AC24 | 10 |
| Backup relay AC 24V HV | | 770929 | RE2WHV-0929 AC24 | 10 |
| Backup relay AC 110V | | 770930 | RE2W-0930 AC120 | 10 |
| Backup relay AC 110V HV | | 770931 | RE2WHV-0931 AC120 | 10 |
| Backup relay AC 230V | | 770924 | RE2W-0924 AC230 | 10 |
| Backup relay AC 230V HV | | 770925 | RE2WHV-0925 AC230 | 10 |
| Protecting module AC 6-24V | | 770913 | PM91G-0913 | 10 |
| Protecting module AC/DC 110-230V | | 770917 | PM93G-0917 | 10 |
| Plate | | 770902 | REM-0902 | 10 |
| Jumper comb 10A | black | 770908 | REP-0908 | 10 |

Comments

Part-No. 770250–770247: Hard gold-plated contacts.

So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Microplug Relay Module

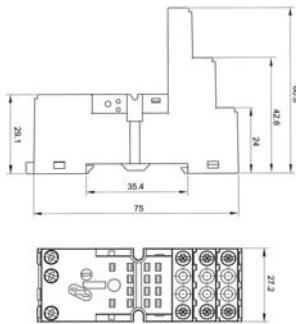
DC-Relay-Interface, 2 CO contact, pluggable

AC/DC 250 V; 7 A, 1750 VA

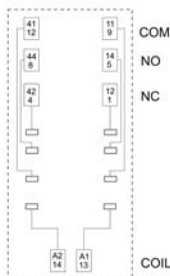
Screw terminal, Contact material: AgNi, AgNi + 5 µm HV



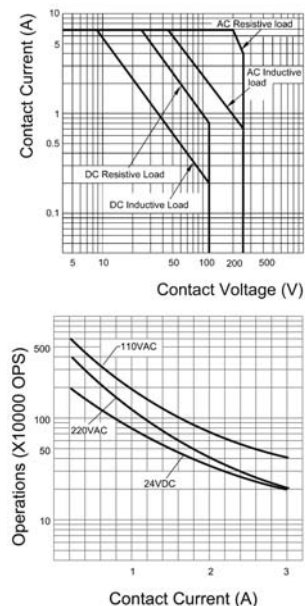
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|---|----------------|--|-----------------------------|-------------------|
| Relay Module with AgNi | | | | |
| Rated voltage | DC 12 V | 770540 | REI2-0540 2W DC 12 V | 5 |
| | DC 24 V | 770541 | REI2-0541 2W DC 24 V | 5 |
| | DC 115 V | 770546 | REI2-0546 2W DC 115 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | DC 12 V | 770560 | REI2HV-0560 2W HTV DC 12 V | 5 |
| | DC 24 V | 770561 | REI2HV-0561 2W HTV DC 24 V | 5 |
| | DC 115 V | 770566 | REI2HV-0566 2W HTV DC 115 V | 5 |
| Input | | | | |
| | DC 12 V | DC 24 V | DC 115 V | |
| Input voltage range | 9.6 – 13.2 V | 19.2 – 26.4 V | 88.0 – 121.0 V | |
| Rated current | 75.0 mA | 37.0 mA | 11.0 mA | |
| Rated voltage | DC 12 V | DC 24 V | DC 115 V | |
| Power consumption | | 0.9 W | | |
| Interrupting voltage | <1.2 V | <2.4 V | <11 V | |
| Protection device | | overload diode | | |
| Max. length of connecting lead | | – | | |
| Status indication | | LED green | | |
| Output | | | | |
| Contact type | | 2 change over contact | | |
| Min. switching voltage | | AC/DC 5 V | | |
| Max. switching voltage | | AC/DC 250 V | | |
| Min. switching current | | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA | | |
| Max. switching current | | AC/DC 7 A | | |
| Switching capacity AC 15 | | at 24 V: 2.5 A; at 230 V: 1.5 A | | |
| Switching capacity DC 13 | | at 24 V: 1.8A; at 115 V: 300 mA, at 230 V: 150 mA | | |
| Max. switching capacity | | 3000 VA | | |
| Contact material | | AgNi or AgNi + 5 µm HV | | |
| Mechanical service life | | >2 x 10 ⁷ operations | | |
| Switch-on delay | | 25 ms | | |
| Switch-off delay | | 25 ms | | |
| Clearance/creep. dist. (contol/load side) | | Clearance distance: > 2 mm; creepage distance: > 3mm | | |
| Rated insulation voltage (EN 50178) | | AC 250 V (category C 250) | | |
| General | | | | |
| Housing material | | PA 66+GF V0 (UL) | | |
| IP rating | | IP 20 | | |
| Field installation | | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | | 1.5 kV _{eff} | | |
| Safe isolation | | yes | | |
| Operation temperature range | | -40 °C – 70 °C | | |
| Storage temperature range | | -40 °C – 85 °C | | |
| Dimensions (w x h x d) | | 27.0 x 75.0 x 82.0 mm | | |
| Weight (kg/piece) | | 0.097 | | |
| Approvals | | UL, CSA | | |
| Termination | | Screw terminal: 0.2–4.0 mm ² | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Relay socket | | 770903 | RES2W-0903 | 10 |
| Backup relay DC 12V | | 770500 | RE2W-0500 DC12 | 10 |
| Backup relay DC 12V HV | | 770520 | RE2WHV-0520 DC12 | 10 |
| Backup relay DC 24V | | 770501 | RE2W-0501 DC24 | 10 |
| Backup relay DC 24V HV | | 770521 | RE2WHV-0521 DC24 | 10 |
| Backup relay DC 110V | | 770506 | RE2W-0506 DC120 | 10 |
| Backup relay DC 110V HV | | 770526 | RE2WHV-0526 DC120 | 10 |
| Protecting module AC 6-24V | | 770911 | PM41G-0911 | 10 |
| Protecting module DC 110V | | 770916 | PM43G-0916 | 10 |
| Plate | | 770907 | REM WT-0907 | 10 |
| Jumper comb 10A | black | 770909 | REI-0909 | 10 |

Comments

Part-No.

Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Microplug Relay Module

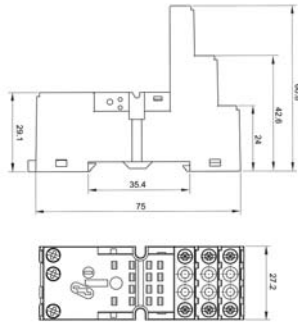
AC-Relay-Interface, 2 CO contact, pluggable

AC/DC 250 V; 7 A, 1750 VA

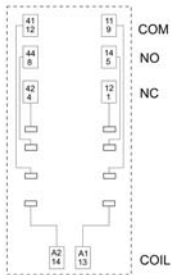
Screw terminal, Contact material: AgNi, AgNi + 5 µm HV



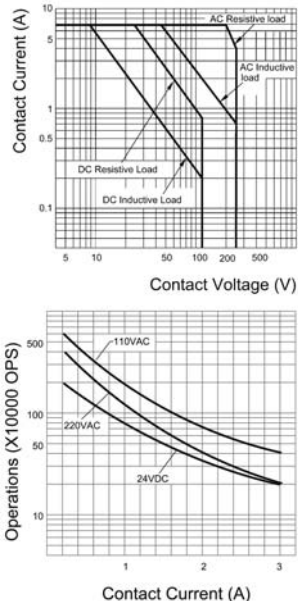
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|--|----------|--------|-----------------------------|---|
| Relay Module with AgNi | | | | |
| Rated voltage | AC 12 V | 770550 | REI2-0550 2W AC 12 V | 5 |
| | AC 24 V | 770551 | REI2-0551 2W AC 24 V | 5 |
| | AC 120 V | 770556 | REI2-0556 2W AC 120 V | 5 |
| | AC 230 V | 770557 | REI2-0557 2W AC 230 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | AC 12 V | 770570 | REI2HV-0570 2W HTV AC 12 V | 5 |
| | AC 24 V | 770571 | REI2HV-0571 2W HTV AC 24 V | 5 |
| | AC 120 V | 770576 | REI2HV-0576 2W HTV AC 120 V | 5 |
| | AC 230 V | 770577 | REI2HV-0577 2W HTV AC 230 V | 5 |

| Input | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
|---|--|---------------|----------------|-----------------|
| Input voltage range | 9.6 – 13.2 V | 19.2 – 26.4 V | 96.0 – 132.0 V | 184.0 – 253.0 V |
| Rated current | 260.0 mA | 130.0 mA | 26.0 mA | 16.0 mA |
| Rated voltage | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
| Power consumption | 1.2 VA | | | |
| Interrupting voltage | <3.6 V | <7.2 V | <36 V | <66 V |
| Protection device | varistor | | | |
| Max. length of connecting lead | – | | | |
| Status indication | LED green | | | |
| Output | | | | |
| Contact type | 2 change over contact | | | |
| Min. switching voltage | AC/DC 5 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA | | | |
| Max. switching current | AC/DC 7 A | | | |
| Switching capacity AC 15 | at 24 V: 2.5 A; at 230 V: 1.5 A | | | |
| Switching capacity DC 13 | at 24 V: 1.8A; at 115 V: 300 mA, at 230 V: 150 mA | | | |
| Max. switching capacity | 1750 VA | | | |
| Contact material | AgNi or AgNi + 5 µm HV | | | |
| Mechanical service life | >2 x 10 ⁷ operations | | | |
| Switch-on delay | 25 ms | | | |
| Switch-off delay | 25 ms | | | |
| Clearance/creep. dist. (contol/load side) | Clearance distance: > 2 mm; creepage distance: > 3mm | | | |
| Rated insulation voltage (EN 50178) | AC 250 V (category C 250) | | | |

| General | |
|---------------------------------|---|
| Housing material | PA 66+GF V0 (UL) |
| IP rating | IP 20 |
| Field installation | rail TS 35 (EN 50022) |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Safe isolation | yes |
| Operation temperature range | -40 °C – 70 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 27.0 x 75.0 x 82.0 mm |
| Weight (kg/piece) | 0.097 |
| Approvals | UL, CSA |
| Termination | Screw terminal: 0.2–4.0 mm ² |

| Accessories | Colour | Article number | Type | Pkg. units |
|--------------------------------------|--------|----------------|-------------------|------------|
| Relay socket | | 770903 | RES2W-0903 | 10 |
| Backup relay AC 12V | | 770510 | RE2W-0510 AC12 | 10 |
| Backup relay AC 12V HV | | 770530 | RE2WHV-0530 AC12 | 10 |
| Backup relay AC 24V | | 770511 | RE2W-0511 AC24 | 10 |
| Backup relay AC 24V HV | | 770531 | RE2WHV-0531 AC24 | 10 |
| Backup relay AC 120V | | 770516 | RE2W-0516 AC120 | 10 |
| Backup relay AC 120V HV | | 770536 | RE2WHV-0536 AC120 | 10 |
| Backup relay 230 V | | 770517 | RE2W-0517 AC230 | 10 |
| Backup relay AC 230V HV | | 770537 | RE2WHV-0537 AC230 | 10 |
| Protecting module A AC 6-24V | | 770913 | PM91G-0913 | 10 |
| Protecting module AC/ DC 110V – 230V | | 770917 | PM93G-0917 | 10 |
| Plate | | 770907 | REM WT-0907 | 10 |
| Jumper comb 10A | black | 770909 | REI-0909 | 10 |

Comments
Part-No.
Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Microplug Relay Module

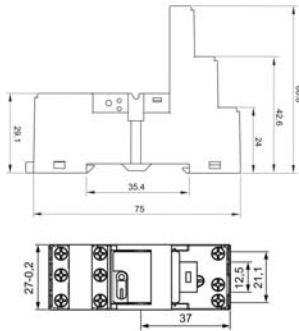
DC-Relay-Interface, 3 CO contact, pluggable

AC/DC 250 V; 7 A, 1750 VA

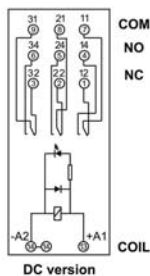
Screw terminal, Contact material: AgNi, AgNi + 5 µm HV



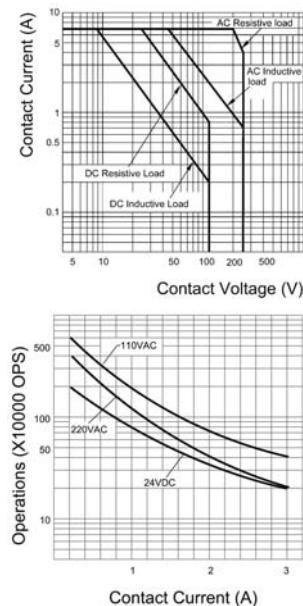
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|---|----------------|--|-----------------------------|-------------------|
| Relay Module with AgNi | | | | |
| Rated voltage | DC 12 V | 770340 | REI3-0340 3W DC 12 V | 5 |
| | DC 24 V | 770341 | REI3-0341 3W DC 24 V | 5 |
| | DC 115 V | 770346 | REI3-0346 3W DC 115 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | DC 12 V | 770360 | REI3HV-0360 3W HTV DC 12 V | 5 |
| | DC 24 V | 770361 | REI3HV-0361 3W HTV DC 24 V | 5 |
| | DC 115 V | 770366 | REI3HV-0366 3W HTV DC 115 V | 5 |
| Input | | | | |
| | DC 12 V | DC 24 V | DC 115 V | |
| Input voltage range | 9.6 – 13.2 V | 19.2 – 26.4 V | 88.0 – 121.0 V | |
| Rated current | 75.0 mA | 37.0 mA | 11.0 mA | |
| Rated voltage | DC 12 V | DC 24 V | DC 115 V | |
| Power consumption | | 0.9 W | | |
| Interrupting voltage | <1.2 V | <2.4 V | <11 V | |
| Protection device | | overload diode | | |
| Max. length of connecting lead | | – | | |
| Status indication | | LED green | | |
| Output | | | | |
| Contact type | | 3 change over contact | | |
| Min. switching voltage | | AC/DC 5 V | | |
| Max. switching voltage | | AC/DC 250 V | | |
| Min. switching current | | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA | | |
| Max. switching current | | AC/DC 7 A | | |
| Switching capacity AC 15 | | at 24 V: 2.5 A; at 230 V: 1.5 A | | |
| Switching capacity DC 13 | | at 24 V: 1.8A; at 115 V: 300 mA, at 230 V: 150 mA | | |
| Max. switching capacity | | 1750 VA | | |
| Contact material | | AgNi or AgNi + 5 µm HV | | |
| Mechanical service life | | >2 x 10 ⁷ operations | | |
| Switch-on delay | | 25 ms | | |
| Switch-off delay | | 25 ms | | |
| Clearance/creep. dist. (contol/load side) | | Clearance distance: > 2 mm; creepage distance: > 3mm | | |
| Rated insulation voltage (EN 50178) | | AC 250 V (category C 250) | | |
| General | | | | |
| Housing material | | PA 66+GF V0 (UL) | | |
| IP rating | | IP 20 | | |
| Field installation | | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | | 1.5 kV _{eff} | | |
| Safe isolation | | yes | | |
| Operation temperature range | | -40 °C – 70 °C | | |
| Storage temperature range | | -40 °C – 85 °C | | |
| Dimensions (w x h x d) | | 27.0 x 75.0 x 82.0 mm | | |
| Weight (kg/piece) | | 0.107 | | |
| Approvals | | UL, CSA | | |
| Termination | | Screw terminal: 0.2–4.0 mm ² | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Relay socket | | 770904 | RES3W-0904 | 10 |
| Backup relay DC 12V | | 770300 | RE3W-0300 DC12 | 10 |
| Backup relay DC 12V HV | | 770320 | RE3WHV-0320 DC12 | 10 |
| Backup relay DC 24V | | 770301 | RE3W-0301 DC24 | 10 |
| Backup relay DC 24V HV | | 770321 | RE3WHV-0321 DC24 | 10 |
| Backup relay DC 110V | | 770306 | RE3W-0306 DC120 | 10 |
| Backup relay DC 110V HV | | 770326 | RE3WHV-0326 DC120 | 10 |
| Protecting module AC 6-24V | | 770911 | PM41G-0911 | 10 |
| Protecting module DC 110V | | 770916 | PM43G-0916 | 10 |
| Plate | | 770907 | REM WT-0907 | 10 |
| Jumper comb 10A | black | 770909 | REI-0909 | 10 |

Comments

Part-No.

Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Microplug Relay Module

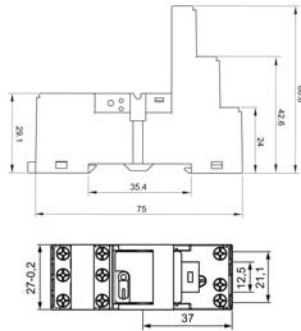
AC-Relay-Interface, 3 CO contact, pluggable

AC/DC 250 V; 7 A, 1750 VA

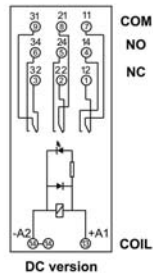
Screw terminal, Contact material: AgNi, AgNi + 5 µm HV



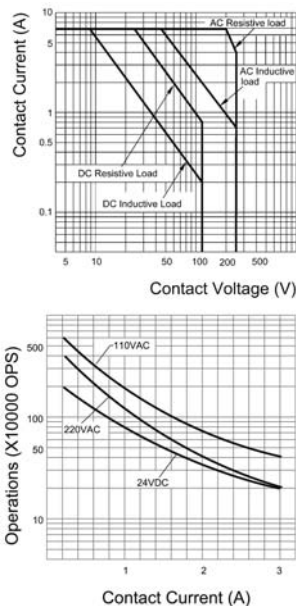
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|--|----------|--------|-----------------------------|---|
| Relay Module with AgNi | | | | |
| Rated voltage | AC 12 V | 770350 | REI3-0350 3W AC 12 V | 5 |
| | AC 24 V | 770351 | REI3-0351 3W AC 24 V | 5 |
| | AC 120 V | 770356 | REI3-0356 3W AC 120 V | 5 |
| | AC 230 V | 770357 | REI3-0357 3W AC 230 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | AC 12 V | 770370 | REI3HV-0370 3W HTV AC 12 V | 5 |
| | AC 24 V | 770371 | REI3HV-0371 3W HTV AC 24 V | 5 |
| | AC 120 V | 770376 | REI3HV-0376 3W HTV AC 120 V | 5 |
| | AC 230 V | 770377 | REI3HV-0377 3W HTV AC 230 V | 5 |

| Input | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
|--------------------------------|--------------|---------------|----------------|-----------------|
| Input voltage range | 9.6 – 13.2 V | 19.2 – 26.4 V | 96.0 – 132.0 V | 184.0 – 253.0 V |
| Rated current | 260.0 mA | 130.0 mA | 26.0 mA | 16.0 mA |
| Rated voltage | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
| Power consumption | 1.2 VA | | | |
| Interrupting voltage | <3.6 V | <7.2 V | <36 V | <66 V |
| Protection device | varistor | | | |
| Max. length of connecting lead | - | | | |
| Status indication | LED green | | | |

| Output | |
|---|--|
| Contact type | 3 change over contact |
| Min. switching voltage | AC/DC 5 V |
| Max. switching voltage | AC/DC 250 V |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA |
| Max. switching current | AC/DC 7 A |
| Switching capacity AC 15 | at 24 V: 2.5 A; at 230 V: 1.5 A |
| Switching capacity DC 13 | at 24 V: 1.8A; at 115 V: 300 mA, at 230 V: 150 mA |
| Max. switching capacity | 1750 VA |
| Contact material | AgNi or AgNi + 5 µm HV |
| Mechanical service life | >2 x 10 ⁷ operations |
| Switch-on delay | 25 ms |
| Switch-off delay | 25 ms |
| Clearance/creep. dist. (contol/load side) | Clearance distance: > 2 mm; creepage distance: > 3mm |
| Rated insulation voltage (EN 50178) | AC 250 V (category C 250) |

| General | |
|---------------------------------|---|
| Housing material | PA 66+GF V0 (UL) |
| IP rating | IP 20 |
| Field installation | rail TS 35 (EN 50022) |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Safe isolation | yes |
| Operation temperature range | -40 °C – 70 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 27.0 x 75.0 x 82.0 mm |
| Weight (kg/piece) | 0.107 |
| Approvals | UL, CSA |
| Termination | Screw terminal: 0.2–4.0 mm ² |

| Accessories | Colour | Article number | Type | Pkg. units |
|----------------------------------|--------|----------------|-------------------|------------|
| Relay socket | | 770904 | RES3W-0904 | 10 |
| Backup relay AC 12V | | 770310 | RE3W-0310 AC12 | 10 |
| Backup relay AC 12V HV | | 770330 | RE3WHV-0330 AC12 | 10 |
| Backup relay AC 24V | | 770311 | RE3W-0311 AC24 | 10 |
| Backup relay AC 24V HV | | 770331 | RE3WHV-0331 AC24 | 10 |
| Backup relay AC 120V | | 770316 | RE3W-0316 AC120 | 10 |
| Backup relay AC 120V HV | | 770336 | RE3WHV-0336 AC120 | 10 |
| Backup relay AC 230V | | 770317 | RE3W-0317 AC230 | 10 |
| Backup relay AC 230V HV | | 770337 | RE3WHV-0337 AC230 | 10 |
| Protecting module AC 6-24V | | 770913 | PM91G-0913 | 10 |
| Protecting module AC/DC 110-230V | | 770917 | PM963G-0917 | 10 |
| Plate | | 770907 | REM WT-0907 | 10 |
| Jumper comb 10A | black | 770909 | REI-0909 | 10 |

Comments
Part-No.
Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Microplug Relay Module

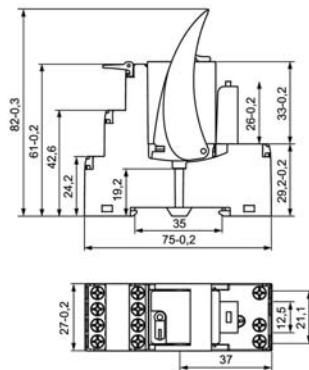
DC-Relay-Interface, 4 CO contact, pluggable

AC/DC 250 V; 5 A, 1250 VA

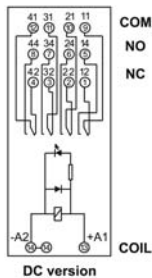
Screw terminal, Contact material: AgNi, AgNi + 5 µm HV



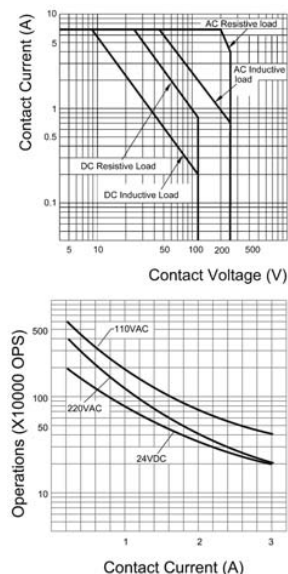
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|--|----------------|--|-----------------------------|-------------------|
| Relay Module with AgNi | | | | |
| Rated voltage | DC 12 V | 770440 | REI4-0440 4W DC 12 V | 5 |
| | DC 24 V | 770441 | REI4-0441 4W DC 24 V | 5 |
| | DC 115 V | 770446 | REI4-0446 4W DC 115 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | DC 12 V | 770460 | REI4HV-0460 4W HTV DC 12 V | 5 |
| | DC 24 V | 770461 | REI4HV-0461 4W HTV DC 24 V | 5 |
| | DC 115 V | 770466 | REI4HV-0466 4W HTV DC 115 V | 5 |
| Input | | | | |
| | DC 12 V | DC 24 V | DC 115 V | |
| Input voltage range | 9.6 – 13.2 V | 19.2 – 26.4 V | 88.0 – 121.0 V | |
| Rated current | 75.0 mA | 37.0 mA | 11.0 mA | |
| Rated voltage | DC 12 V | DC 24 V | DC 115 V | |
| Power consumption | | 0.9 W | | |
| Interrupting voltage | <1.2 V | <2.4 V | 11 V/11 V | |
| Protection device | | Overload diode | | |
| Max. length of connecting lead | | – | | |
| Status indication | | LED green | | |
| Output | | | | |
| Contact type | | 4 change over contact | | |
| Min. switching voltage | | AC/DC 5 V | | |
| Max. switching voltage | | AC/DC 250 V | | |
| Min. switching current | | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA | | |
| Max. switching current | | AC/DC 5 A | | |
| Switching capacity AC 15 | | at 24 V: 2.5 A; at 230 V: 1.5 A | | |
| Switching capacity DC 13 | | at 24 V: 1.8A; at 115 V: 300 mA, at 230 V: 150 mA | | |
| Max. switching capacity | | 1250 VA | | |
| Contact material | | AgNi or AgNi + 5 µm HV | | |
| Mechanical service life | | >2 x 10 ⁷ operations | | |
| Switch-on delay | | 25 ms | | |
| Switch-off delay | | 25 ms | | |
| Clearance/creep. dist. | | Clearance distance: > 2 mm; creepage distance: > 3mm | | |
| Rated insulation voltage (EN 50178) | | AC 250 V (category B 250) | | |
| General | | | | |
| Housing material | | PA 66+GF V0 (UL) | | |
| IP rating | | IP 20 | | |
| Field installation | | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | | 1.5 kV _{eff} | | |
| Safe isolation | | yes | | |
| Operation temperature range | | -40 °C – 70 °C | | |
| Storage temperature range | | -40 °C – 85 °C | | |
| Dimensions (w x h x d) | | 27.0 x 75.0 x 82.0 mm | | |
| Weight (kg/piece) | | 0.108 | | |
| Approvals | | UL, CSA | | |
| Termination | | Screw terminal: 0.2–4.0 mm ² | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Relay socket | | 770905 | RES4W-0905 | 10 |
| Backup relay DC 12 V | | 770400 | RE4W-0400 DC12 | 10 |
| Backup relay DC 12 V HV | | 770420 | RE4WHV-0420 DC12 | 10 |
| Backup relay DC 24 V | | 770401 | RE4W-0401 DC24 | 10 |
| Backup relay DC 24 V HV | | 770421 | RE4WHV-0421 DC24 | 10 |
| Backup relay DC 110 V | | 770406 | RE4W-0406 DC120 | 10 |
| Backup relay DC 110 V HV | | 770426 | RE4WHV-0426 DC120 | 10 |
| Protecting module AC 6-24 V | | 770911 | PM41G-0911 | 10 |
| Protecting module DC 110 V | | 770916 | PM43G-0916 | 10 |
| Plate | | 770907 | REM WT-0907 | 10 |
| Jumper comb 10A | black | 770909 | REI-0909 | 10 |

Comments

Part-No. 770460–770466:

Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Microplug Relay Module

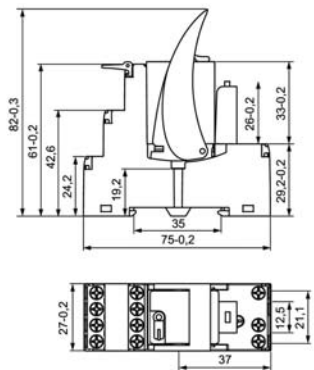
AC-Relay-Interface, 4 CO contact, pluggable

AC/DC 250 V; 5 A, 1250 VA

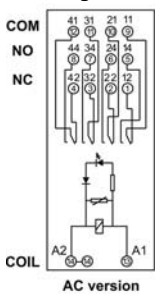
Screw terminal, Contact material: AgNi, AgNi + 5 µm HV



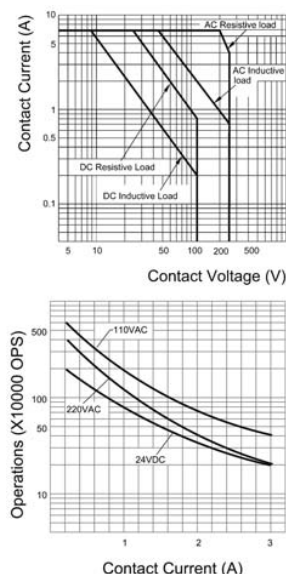
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|--|----------|--------|-----------------------------|---|
| Relay Module with AgNi | | | | |
| Rated voltage | AC 12 V | 770450 | REI4-0450 4W AC 12 V | 5 |
| | AC 24 V | 770451 | REI4-0451 4W AC 24 V | 5 |
| | AC 120 V | 770456 | REI4-0456 4W AC 120 V | 5 |
| | AC 230 V | 770457 | REI4-0457 4W AC 230 V | 5 |
| Relay Module with AgNi + 5µm HV | | | | |
| Rated voltage | AC 12 V | 770470 | REI4HV-0470 4W HTV AC 12 V | 5 |
| | AC 24 V | 770471 | REI4HV-0471 4W HTV AC 24 V | 5 |
| | AC 120 V | 770476 | REI4HV-0476 4W HTV AC 120 V | 5 |
| | AC 230 V | 770477 | REI4HV-0477 4W HTV AC 230 V | 5 |

| Input | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
|--------------------------------|--------------|---------------|----------------|-----------------|
| Input voltage range | 9.6 – 13.2 V | 19.2 – 26.4 V | 96.0 – 132.0 V | 184.0 – 253.0 V |
| Rated current | 260.0 mA | 130.0 mA | 26.0 mA | 16.0 mA |
| Rated voltage | AC 12 V | AC 24 V | AC 120 V | AC 230 V |
| Power consumption | 1.2 VA | | | |
| Interrupting voltage | <3.6 V | <7.2 V | <36 V | <66 V |
| Protection device | Varistor | | | |
| Max. length of connecting lead | - | | | |
| Status indication | LED green | | | |

| Output | |
|---|--|
| Contact type | 4 change over contact |
| Min. switching voltage | AC/DC 5 V |
| Max. switching voltage | AC/DC 250 V |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+5µm HV: AC/DC 2mA |
| Max. switching current | AC/DC 5 A |
| Switching capacity AC 15 | at 24 V: 2.5 A; at 230 V: 1.5 A |
| Switching capacity DC 13 | at 24 V: 1.8A; at 115 V: 300 mA, at 230 V: 150 mA |
| Max. switching capacity | 1250 VA |
| Contact material | AgNi or AgNi + 5 µm HV |
| Mechanical service life | >2 x 10 ⁷ operations |
| Switch-on delay | 25 ms |
| Switch-off delay | 25 ms |
| Clearance/creep. dist. (contol/load side) | Clearance distance: > 2 mm; creepage distance: > 3mm |

| | |
|-------------------------------------|---------------------------|
| Rated insulation voltage (EN 50178) | AC 250 V (category B 250) |
|-------------------------------------|---------------------------|

| General | |
|---------------------------------|---|
| Housing material | PA 66+GF V0 (UL) |
| IP rating | IP 20 |
| Field installation | rail TS 35 (EN 50022) |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Safe isolation | yes |
| Operation temperature range | -40 °C – 70 °C |
| Storage temperature range | -40 °C – 85 °C |
| Dimensions (w x h x d) | 27.0 x 75.0 x 82.0 mm |
| Weight (kg/piece) | 0.108 |
| Approvals | UL, CSA |
| Termination | Screw terminal: 0.2–4.0 mm ² |

| Accessories | Colour | Article number | Type | Pkg. units |
|--------------------------------|--------|----------------|-------------------|------------|
| Relay socket | | 770905 | RES4W-0905 | 10 |
| Backup relay AC 12 V | | 770410 | RE4W-0410 AC12 | 10 |
| Backup relay AC 12 V HV | | 770430 | RE4WHV-0430 AC12 | 10 |
| Backup relay AC 24 V | | 770411 | RE4W-0411 AC24 | 10 |
| Backup relay AC 24 V HV | | 770431 | RE4WHV-0431 AC24 | 10 |
| Backup relay AC 120 V | | 770416 | RE4W-0416 AC120 | 10 |
| Backup relay AC 120 V HV | | 770436 | RE4WHV-0436 AC120 | 10 |
| Backup relay AC 230 V | | 770417 | RE4W-0417 AC230 | 10 |
| Backup relay AC 230 V HV | | 770437 | RE4WHV-0437 AC230 | 10 |
| Protecting module AC 6-24 V | | 770913 | PM41G-0913 | 10 |
| Protecting module AC 110-230 V | | 770917 | PM43G-0917 | 10 |
| Plate | | 770907 | REM WT-0907 | 10 |
| Jumper comb 10A | black | 770909 | REI-0909 | 10 |

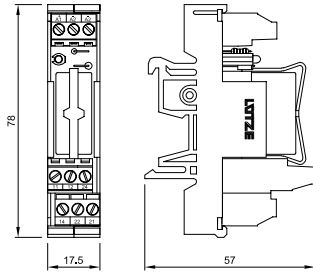
Comments
 Part-No. 770470–770477:
 Hard gold-plated contacts: So that the gold layer is not damaged, the specified values are not permitted to be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Interface Technology - Varioprint Relay Module

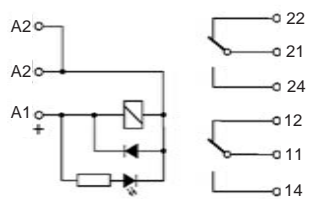
**DC-Relay-Interface, 1, Relay with 2 CO contacts, pluggable
AC/DC 250 V; 5 A, 1250 VA
screw terminal, contact material: AgNi**



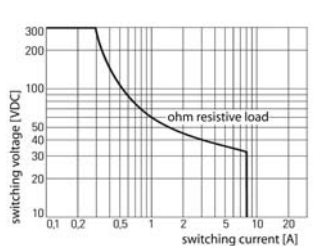
Dimensions



PIN assignment



Limit curve



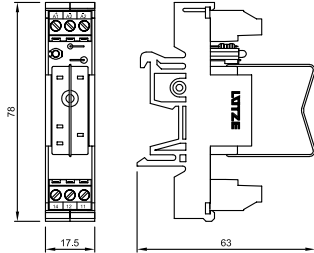
| Description | Part-No. | Type | PU |
|---|---------------|---|---------------------|
| Screw terminal | | | |
| Rated voltage | DC 24 V | 710763 | RPE-1E2S/2W DC 24 V |
| | | | 5 |
| Input | | DC 24 V | |
| Input voltage range | | 20.7 – 30.0 V | |
| Rated current | | 32.0 mA | |
| Rated voltage | | DC 24 V | |
| Interrupting voltage | | – | |
| Protection device | | overload diode | |
| Max. length of connecting lead | | – | |
| Rated insulation voltage (EN 50178) | | 50 V | |
| Status indication | | LED green | |
| Output | | | |
| Contact type | | 2 change over contact | |
| Min. switching voltage | | AC/DC 17 V | |
| Max. switching voltage | | AC/DC 250 V | |
| Min. switching current | | AC/DC 5 mA | |
| Max. switching current | | AC/DC 3 A | |
| Switching capacity AC 15 | | 3 A | |
| Switching capacity DC 13 | | at 24 V: 1A; at 115 V: 200 mA, at 230 V: 100 mA | |
| Max. switching capacity | | 1200 VA | |
| Contact material | | AgNi | |
| Mechanical service life | | > 5 x 10 ⁷ operations | |
| Switch-on delay | | 10 ms | |
| Switch-off delay | | 5 ms | |
| Clearance/creep. dist. (contol/load side) | | > 5.5 mm | |
| Rated insulation voltage (EN 50178) | | 300 V | |
| General | | | |
| Housing material | | PPE | |
| IP rating | | IP 20 | |
| Field installation | | rail TS 35 (EN 50022) | |
| Insulation voltage input/output | | 4.0 kV _{eff} | |
| Safe isolation | | Yes | |
| Operation temperature range | | -25 °C – 60 °C | |
| Storage temperature range | | -40 °C – 80 °C | |
| Dimensions (w x h x d) | | 17.5 x 65.0 x 77.0 mm | |
| Weight (kg/piece) | | 0.058 | |
| Approvals | | – | |
| Termination | | Screw terminal: 0.25–2.5 mm ² | |
| Accessories | Colour | Article number | Type |
| Backup relay | | 712014 | LKSR-2014 DC 24V |
| Identifikation unit | transparent | 710799 | |
| | | | Pkg. units |
| | | | 25 |
| | | | 100 |

Interface Technology - Varioprint Relay Module

DC Relay interface socket, 1 directional contact (2 directional contact)
 AC/DC 250 V, 6 A (3 A)
 Screw terminal

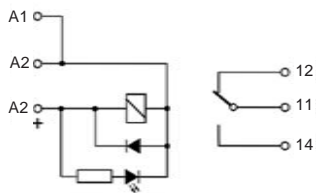


Dimensions

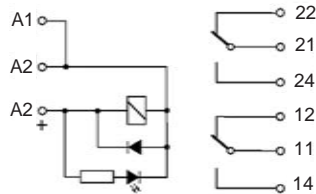


PIN assignment

710150



710152



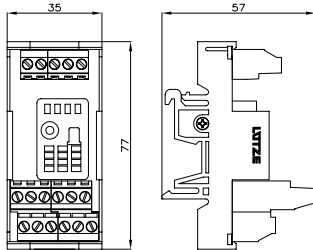
| Description | Part-No. | Type | PU | |
|---|--|-----------------------|---------------------|-------------------|
| 1 change over contact | | | | |
| Rated voltage | DC 24 V | 710150 | RPE-1E1S/1W DC 24 V | 5 |
| 2 change over contact | | | | |
| Rated voltage | DC 24 V | 710152 | RPE-1E2S/2W DC 24 V | 5 |
| Input | | | | |
| DC 24 V | | | | |
| Input voltage range | | | | |
| Rated current | 11.0 mA | | | |
| Interrupting voltage | - | | | |
| Protection device | overload diode | | | |
| Rated insulation voltage (EN 50178) | 50 V | | | |
| Max. length of connecting lead | - | | | |
| Status indication | LED green | | | |
| Rated frequency | - | | | |
| Output | | | | |
| | 710150 | 710152 | | |
| Contact type | 1 change over contact | 2 change over contact | | |
| Min. switching current | - | | | |
| Max. switching current | AC/DC 6 A | AC/DC 3 A | | |
| Min. switching voltage | - | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Switching capacity AC 15 | - | | | |
| Switching capacity DC 13 | - | | | |
| Max. switching capacity | - | | | |
| Contact material | - | | | |
| Mechanical service life | - | | | |
| Switch-on delay | - | | | |
| Switch-off delay | - | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 17.5 x 77.0 x 57.0 mm | | | |
| Weight (kg/piece) | 0.038 | 0.042 | | |
| Approvals | - | | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Relay for 710150 | | 712013 | LKSR-2013 DC24 | 25 |
| Relay for 710152 | | 712014 | LKSR-2014 DC24 | 25 |

Interface Technology - Varioprint Relay Module

AC/DC Relay interface socket for 1 comb relay Gr. II with 4 directional contact AC/DC 250 V, 4 A Screw-/ Spring terminal

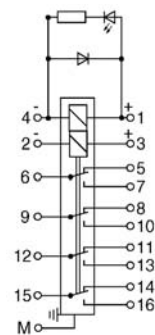


Dimensions

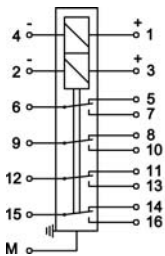


PIN assignment

DC 24 V



AC/DC 250 V



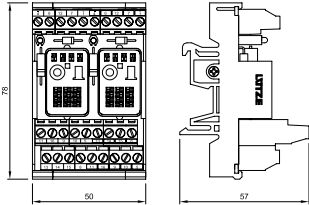
| Description | Part-No. | Type | PU | |
|--|----------------|---|------------------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 710718 | RPE-1K/4W DC 24 V | 5 |
| | AC/DC 250 V | 710710 | RPE-0710 1K/4W – AC/DC 250 V | 5 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 250 V | 710711 | RPE-0711 1K/4W – AC/DC 250 V | 2 |
| Input | | DC 24 V | AC/DC 250 V | |
| Input voltage range | | | | |
| Rated current | 11.0 mA | | – mA | |
| Interrupting voltage | | – | | |
| Protection device | overload diode | | – | |
| Rated insulation voltage (EN 50178) | | | 300 V | |
| Max. length of connecting lead | | | – | |
| Status indication | LED green | | – | |
| Rated frequency | – | | 50–60 Hz | |
| Output | | | | |
| Contact type | | 4 change over contact | | |
| Min. switching voltage | | – | | |
| Max. switching voltage | | AC/DC 250 V | | |
| Min. switching current | | – | | |
| Max. switching current | | AC/DC 4 A | | |
| Switching capacity AC 15 | | – | | |
| Switching capacity DC 13 | | – | | |
| Max. switching capacity | | – | | |
| Contact material | | – | | |
| Mechanical service life | | – | | |
| Switch-on delay | | – | | |
| Switch-off delay | | – | | |
| Clearance/creep. dist. (control/load side) | | – | | |
| Rated insulation voltage (EN 50178) | | | 300 V | |
| Inrush current | | – | | |
| General | | | | |
| Housing material | | PPE | | |
| IP rating | | IP 20 | | |
| Field installation | | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | | 4.0 kV _{eff} | | |
| Safe isolation | | yes | | |
| Operation temperature range | | –25 °C – 60 °C | | |
| Storage temperature range | | –40 °C – 80 °C | | |
| Dimensions (w × h × d) | | 35.0 × 77.0 × 57.0 mm | | |
| Weight (kg/piece) | | 0.070 | | |
| Approvals | | – | | |
| Termination | | Screw-/spring terminal 0.25–2.5 mm ² | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Replacement relay for 710718 | | 712003 | LKSR-2003 4W DC24 | 10 |
| Replacement relay for 710710, 710711 | | 712000 | LKR-2000 4W AC24 | 10 |
| | | 712001 | LKR-2001 4W DC230 | 10 |
| | | 712003 | LKSR-2003 4W DC24 | 10 |
| | | 712004 | LKR-2004 4W DC230 | 10 |
| Mounting bracket relay 712000 and 712001 | | 712002 | Mounting bracket | 50 |
| Mounting bracket relay 712003 and 712004 | | 712005 | Mounting bracket | 50 |

Interface Technology - Varioprint Relay Module

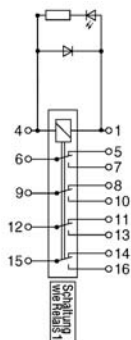
AC/DC Relay interface socket for 2 comb relays Gr. II with 4 directional contact
 AC/DC 250 V, 4 A
 Screw-/ Spring terminal



Dimensions



PIN assignment



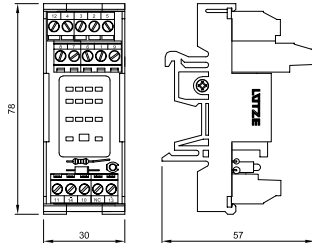
| Description | Part-No. | Type | PU | |
|---|----------------|---|---------------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 710728 | RPE-2K/4W DC 24 V | 5 |
| | DC 24–230 V | 710724 | RPE-2K/4W DC 24 V – 250 V | 10 |
| | AC/DC 230 V | 710720 | RPE-2K/4W – AC/DC 230 V | 10 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 230 V | 716129 | RPE-6129 | 10 |
| Input | | | | |
| | DC 24 V | DC 24–230 V | AC/DC 230 V | |
| Input voltage range | | | | |
| Rated current | | 11.0 mA | – mA | |
| Interrupting voltage | | – | – | |
| Protection device | | overload diode | – | |
| Rated insulation voltage (EN 50178) | 50 V | | 300 V | |
| Max. length of connecting lead | | – | – | |
| Status indication | | LED green | – | |
| Rated frequency | | – | 50–60 Hz | |
| Output | | | | |
| Contact type | | 4 change over contact | | |
| Min. switching voltage | | – | – | |
| Max. switching voltage | | AC/DC 250 V | – | |
| Min. switching current | | – | – | |
| Max. switching current | | AC/DC 4 A | – | |
| Switching capacity AC 15 | | – | – | |
| Switching capacity DC 13 | | – | – | |
| Max. switching capacity | | – | – | |
| Contact material | | – | – | |
| Mechanical service life | | – | – | |
| Switch-on delay | | – | – | |
| Switch-off delay | | – | – | |
| Clearance/creep. dist. (contol/load side) | | – | – | |
| Rated insulation voltage (EN 50178) | | 300 V | – | |
| Inrush current | | – | – | |
| General | | | | |
| Housing material | | PPE | – | |
| IP rating | | IP 20 | – | |
| Field installation | | rail TS 35 (EN 50022) | – | |
| Insulation voltage input/output | | 4.0 kV _{eff} | – | |
| Safe isolation | | yes | – | |
| Operation temperature range | | 0 °C – 70 °C | – | |
| Storage temperature range | | -20 °C – 80 °C | – | |
| Dimensions (w x h x d) | | 50.0 x 77.0 x 57.0 mm | – | |
| Weight (kg/piece) | | 0.106 | – | |
| Approvals | | – | – | |
| Termination | | Screw-/spring terminal 0.25–2.5 mm ² | – | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Relay for 710728 | | 712003 | LKSR-2003 4W DC24 | 10 |
| Relay for 710724 | | 712003 | LKSR-2003 4W DC24 | 10 |
| Relay for 710720, 716129 | | 712000 | LKR-2000 4W AC24 | 10 |
| | | 712001 | LKR-2001 4W DC230 | 10 |
| | | 712003 | LKSR-2003 4W DC24 | 10 |
| | | 712004 | LKR-2004 4W DC230 | 10 |
| Mounting bracket relay 712000 and 712001 | | 712002 | Mounting bracket | 50 |
| Mounting bracket relay 712003 and 712004 | | 712005 | Mounting bracket | 50 |

Interface Technology - Varioprint Relay Module

AC/DC Relay interface socket for 1 industrial relay with 4 directional contact AC/DC 250 V, 5 A Screw terminal

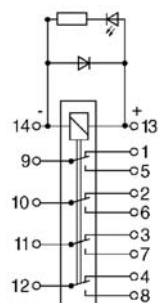


Dimensions

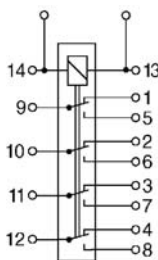


PIN assignment

DC 24 V



AC/DC 230 V



| Description | Part-No. | Type | PU | |
|-----------------------|-------------|--------|--------------------------|---|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 710738 | RPE-1U/4W DC 24 V | 5 |
| | AC/DC 230 V | 710730 | RPE-1U/4W KL AC/DC 230 V | 5 |

| Input | DC 24 V | AC/DC 230 V |
|-------------------------------------|----------------|-------------|
| Input voltage range | | |
| Rated current | | 11.0 mA |
| Interrupting voltage | | – |
| Protection device | overload diode | – |
| Rated insulation voltage (EN 50178) | 50 V | 300 V |
| Max. length of connecting lead | | – |
| Status indication | LED green | – |
| Rated frequency | – | 50–60 Hz |

| Output | |
|---|--|
| Contact type | 4 change over contact |
| Min. switching voltage | – |
| Max. switching voltage | AC/DC 250 V |
| Min. switching current | – |
| Max. switching current | AC/DC 5 A |
| Switching capacity AC 15 | – |
| Switching capacity DC 13 | – |
| Max. switching capacity | – |
| Contact material | – |
| Mechanical service life | – |
| Switch-on delay | – |
| Switch-off delay | – |
| Clearance/creep. dist. (contol/load side) | – |
| Rated insulation voltage (EN 50178) | 300 V |
| Inrush current | – |
| General | |
| Housing material | PPE |
| IP rating | IP 20 |
| Field installation | rail TS 35 (EN 50022) |
| Insulation voltage input/output | 4.0 kV _{eff} |
| Safe isolation | yes |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 80 °C |
| Dimensions (w × h × d) | 30.0 × 77.0 × 57.0 mm |
| Weight (kg/piece) | 0.064 |
| Approvals | – |
| Termination | Screw terminal: 0.25–2.5 mm ² |

| Accessories | Colour | Article number | Type | Pkg. units |
|------------------|--------|----------------|-------------------|------------|
| Relay for 710738 | | 712006 | LIR-2006 4W DC24 | 10 |
| Relay for 710730 | | 712008 | LIR-2008 4W AC230 | 10 |
| Mounting bracket | | 712009 | Mounting bracket | 10 |

Interface Technology - Microcompact Relay Module

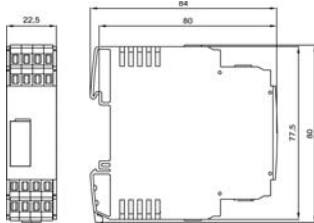
DC Relay-Module, 1 Relay with positively driven contact, 2 NC and 4 NO contact

AC/DC 250V, 6A, 1500 VA

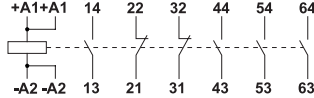
Spring terminal, contact material: AgSnO₂+ 0.2 µm HV



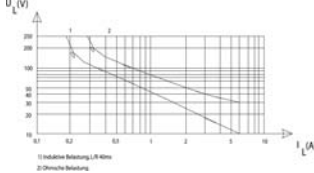
Dimensions



PIN assignment



Limit curve



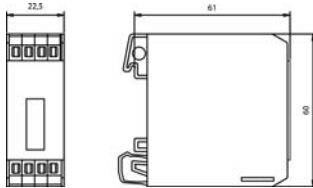
| Description | Part-No. | Type | PU | |
|---|--|-----------------------|--------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 762092 | RE 6-2092 DC 24 V | |
| | DC 110 V | 762093 | RE 6-2093 DC 110 V | |
| Spring terminal | | | | |
| Rated voltage | DC 24 V | 762089 | RE 6-2089 DC 24 V | |
| | DC 110 V | 762090 | RE 6-2090 DC 110 V | |
| Input | | | | |
| | DC 24 V | | DC 110 V | |
| Input voltage range | 16.8 V – 30.0 V | | 77.0 V – 137.5 V | |
| Rated current | 59.0 mA | | 15.0 mA | |
| Interrupting voltage | <2.4 V | | <11 V | |
| Protection device | | Bridge rectifier | | |
| Rated insulation voltage (EN 50178) | 50 V | | 160 V | |
| Max. length of connecting lead | | – | | |
| Status indication | | LED yellow | | |
| Rated frequency | | – | | |
| Output | | | | |
| Contact type | 2 normally close contact / 4 normally open contact, positively driven contact EN 50205 - A | | | |
| Min. switching voltage | AC/DC 5 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 5 mA | | | |
| Max. switching current | AC/DC 6 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1500 VA | | | |
| Contact material | AgSnO ₂ + 0.2 µm HV | | | |
| Mechanical service life | 2 x 10 ⁷ operations | | | |
| Switch-on delay | 10 ms | | | |
| Switch-off delay | 10 ms | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 320 V | | | |
| Inrush current | 20 A (20 ms) | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | Yes | | yes | |
| Operation temperature range | -25°C – 70°C (Class T3 according to EN 30155) | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 22.5 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.090 | | | |
| Approvals | cULus in preparation | | | |
| Termination | Screw-/spring terminal 0.08–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 7x20 mm | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-0615 | 1 |

Interface Technology - Minicompact Relay Module

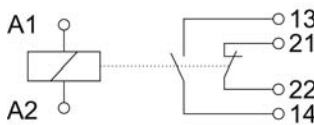
DC Relay-Module, 1 Relay with positively driven contact, 1 NC and 1 NO contact
 AC/DC 250 V, 5 A, 1250 VA
 Screw-/spring terminal, contact material AgSnO₂ + 0.2 µm HV



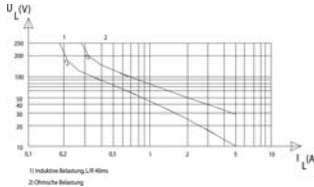
Dimensions



PIN assignment



Limit curve



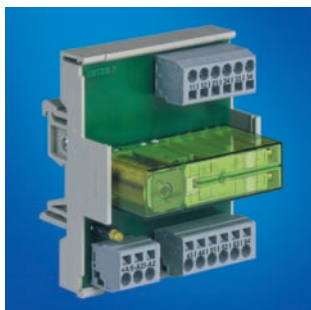
| Description | Part-No. | Type | PU | |
|--|--|-----------------------|--------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 730754 | RE 4-0754 DC 24 V | |
| | DC 110 V | 730755 | RE 4-0755 DC 110 V | |
| Spring terminal | | | | |
| Rated voltage | DC 24 V | 731754 | RE 4-1754 DC 24 V | |
| | DC 110 V | 731755 | RE 4-1755 DC 110 V | |
| Input | | | | |
| | DC 24 V | | DC 110 V | |
| Input voltage range | 16.8 V – 30.0 V | | 77.0 V – 137.5 V | |
| Rated current | 59.0 mA | | 15.0 mA | |
| Interrupting voltage | <2.4 V | | <11 V | |
| Protection device | | Bridge rectifier | | |
| Rated insulation voltage (EN 50178) | 50 V | | 160 V | |
| Max. length of connecting lead | | – | | |
| Status indication | | LED yellow | | |
| Rated frequency | | – | | |
| Output | | | | |
| Contact type | 1 normally close contact / 1 normally open contact, positively driven contact EN 50205 - A | | | |
| Min. switching voltage | AC/DC 5 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 5 A | | | |
| Max. switching current | AC/DC 8 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | | |
| Max. switching capacity | 1250 VA | | | |
| Contact material | AgSnO ₂ + 0.2 µm HV | | | |
| Mechanical service life | 2 x 10 ⁷ operations | | | |
| Switch-on delay | 10 ms | | | |
| Switch-off delay | 10 ms | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 250 V | | | |
| Inrush current | 20 A (20 ms) | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25°C – 70°C (Class T3 according to EN 30155) | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 22.5 x 60.0 x 67.0 mm | | | |
| Weight (kg/piece) | 0.053 | | | |
| Approvals | cULus in preparation | | | |
| Termination | Screw-/spring terminal 0.08–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 9x20 mm | white | 681315 | BZT 0920 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 9 x 20 mm (Sheet with 270 labels) | | 681032 | LEB-0924 | 1 |

Interface Technology - Varioprint Relay Module

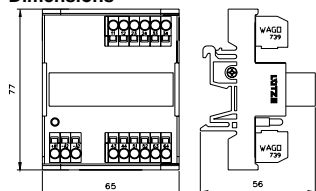
DC Relay-Module, 1 Relay with positively driven contact, 2 NC and 4 NO contact

AC/DC 250 V, 6 A, 1500 VA

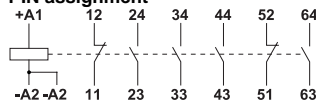
Spring terminal, contact material: AgSnO₂ + 0.2 μm HV



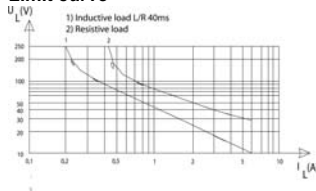
Dimensions



PIN assignment



Limit curve



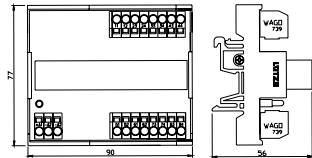
| Description | Part-No. | Type | PU |
|--|--|------------------|---------------------|
| Spring terminal | | | |
| Rated voltage | DC 24 V | 716300 | RPE 6-6300 DC 24 V |
| | DC 110 V | 716301 | RPE 6-6301 DC 110 V |
| Input | | | |
| | DC 24 V | DC 110 V | |
| Input voltage range | 16.8 V – 30.0 V | 77.0 V – 137.5 V | |
| Rated current | 35.0 mA | 15.0 mA | |
| Interrupting voltage | <2.4 V | <11 V | |
| Protection device | Overload diode and reverse diode | | |
| Rated insulation voltage (EN 50178) | 50 V | 160 V | |
| Max. length of connecting lead | – | | |
| Status indication | LED yellow | | |
| Rated frequency | – | | |
| Output | | | |
| Contact type | 2 normally close contact / 4 normally open contact, positively driven contact EN 50205 - A | | |
| Min. switching voltage | AC/DC 5 V | | |
| Max. switching voltage | AC/DC 250 V | | |
| Min. switching current | AC/DC 5 mA | | |
| Max. switching current | AC/DC 6 A | | |
| Switching capacity AC 15 | 3 A | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | |
| Max. switching capacity | 1500 VA | | |
| Contact material | AgSnO ₂ + 0.2 μm HV | | |
| Mechanical service life | >1 x 10 ⁷ operations | | |
| Switch-on delay | 10 ms | | |
| Switch-off delay | 10 ms | | |
| Clearance/creep. dist. (control/load side) | >10 mm | | |
| Rated insulation voltage (EN 50178) | 250 V | | |
| Inrush current | 20 A (20 ms) | | |
| General | | | |
| Housing material | PPO | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | yes | | |
| Operation temperature range | -25°C – 70°C (Class T3 according to EN 30155) | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 65.0 x 77.0 x 56.0 mm | | |
| Weight (kg/piece) | 0.098 | | |
| Approvals | cULus in preparation | | |
| Termination | Spring terminal 0.08–2.5 mm ² | | |

Interface Technology - Varioprint Relay Module

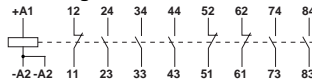
DC Relay-Module, 1 Relay with positively driven contact, 3 NC and 5 NO contact
 AC/DC 250 V, 6 A, 1500 VA
 Spring terminal, contact material: AgSnO₂ + 0.2 µm HV



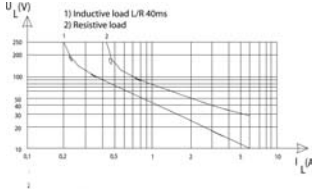
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU |
|--|--|------------------|---------------------|
| Spring terminal | | | |
| Rated voltage | DC 24 V | 716302 | RPE 6-6302 DC 24 V |
| | DC 110 V | 716303 | RPE 6-6303 DC 110 V |
| Input | | | |
| | DC 24 V | DC 110 V | |
| Input voltage range | 16.8 V – 30.0 V | 77.0 V – 137.5 V | |
| Rated current | 35.0 mA | 15.0 mA | |
| Interrupting voltage | <2.4 V | <11 V | |
| Protection device | Overload diode and reverse diode | | |
| Rated insulation voltage (EN 50178) | 50 V | 160 V | |
| Max. length of connecting lead | – | | |
| Status indication | LED yellow | | |
| Rated frequency | – | | |
| Output | | | |
| Contact type | 3 normally close contact / 5 normally open contact, positively driven contact EN 50205 - A | | |
| Min. switching voltage | AC/DC 5 V | | |
| Max. switching voltage | AC/DC 250 V | | |
| Min. switching current | AC/DC 5 mA | | |
| Max. switching current | AC/DC 6 A | | |
| Switching capacity AC 15 | 3 A | | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | | |
| Max. switching capacity | 1500 VA | | |
| Contact material | AgSnO ₂ + 0.2 µm HV | | |
| Mechanical service life | 1 x 10 ⁷ operations | | |
| Switch-on delay | 10 ms | | |
| Switch-off delay | 10 ms | | |
| Clearance/creep. dist. (control/load side) | >10 mm | | |
| Rated insulation voltage (EN 50178) | 250 V | | |
| Inrush current | 20 A (20 ms) | | |
| General | | | |
| Housing material | PPO | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | yes | | |
| Operation temperature range | -25°C – 70°C (Class T3 according to EN 30155) | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 90.0 x 77.0 x 56.0 mm | | |
| Weight (kg/piece) | 0.120 | | |
| Approvals | cULus in preparation | | |
| Termination | Spring terminal 0.08–2.5 mm ² | | |

Interface Technology - Microcompact Relay Module

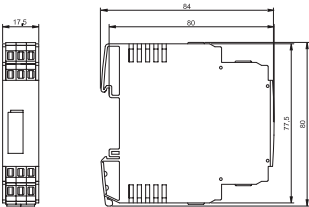
DC current pulse relay with 2 controller inputs, 1 relay with 1 directional contact

AC/DC 250 V, 6 A, 1500 VA

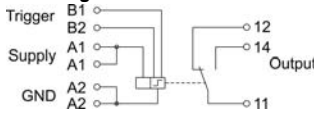
spring terminal, contact material AgNi + 0.15 µm HV



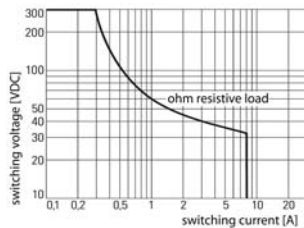
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU |
|------------------------|-------------|--------|------------|
| Spring terminal | | | |
| Rated voltage | DC 24–110 V | 762059 | SRE 6-2059 |
| | DC 24–110 V | 762087 | SRE 6-2087 |

| Supply (A1) | 762059 | 762087 |
|-------------------------------------|--------------------------|--------|
| Input voltage range | 16.8 – 137.5 V | |
| Rated current "Relay on" (DC 24V) | 25 mA | |
| Rated current "Relay on" (DC 110V) | 5 mA | |
| Rated current "Relay off" (DC 24V) | 3.5 mA | |
| Rated current "Relay off" (DC 110V) | 1.4 mA | |
| Protection device | Reverse diode / Varistor | |

| Control side B1 / B2 | | |
|----------------------|--------------------------|-----------------------|
| Control voltage B1 | DC 24 V (16.8–30 V) | |
| Control voltage B2 | DC 110 V (77 – 137.5 V) | DC 36 V (25.2 – 45 V) |
| Rated current B1 | 12 mA | |
| Rated current B2 | 3 mA | 8 mA |
| Debounce time | ≥200 ms | |
| Status indication | LED yellow | |
| Protection device | Reverse diode / Varistor | |

| Output | | |
|---|--|--|
| Contact type | 1 change over contact | |
| Min. switching voltage | AC/DC 1 V | |
| Max. switching voltage | AC/DC 250 V | |
| Min. switching current | AC/DC 1 mA | |
| Max. switching current | AC/DC 6 A | |
| Switching capacity AC 15 | 3 A | |
| Switching capacity DC 13 | at 24 V: 1 A; at 115 V: 200 mA; at 230 V: 100 mA | |
| Max. switching capacity | 1500 VA | |
| Contact material | AgNi + 0,15 µm HV | |
| Mechanical service life | >3 × 10 ⁶ operations | |
| Switch-on delay | – | |
| Switch-off delay | – | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | |
| Rated insulation voltage (EN 50178) | 300 V | |

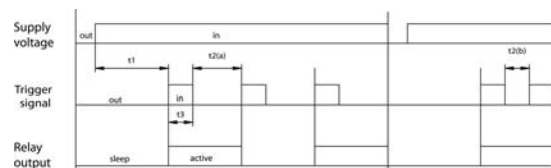
| General | | |
|---------------------------------|--|--|
| Housing material | PPE | |
| IP rating | IP 20 | |
| Field installation | rail TS 35 (EN 50022) | |
| Insulation voltage input/output | 4.0 kV _{eff} | |
| Safe isolation | yes | |
| Operation temperature range | -25 °C – 70 °C | |
| Storage temperature range | -40 °C – 80 °C | |
| Dimensions (w × h × d) | 17.5 × 80.0 × 84.0 mm | |
| Weight (kg/piece) | 0.060 | |
| Approvals | cULus in preparation | |
| Termination | Spring terminal 0.25–2.5 mm ² | |

| Accessories | Colour | Article number | Type | Pkg. units |
|---|--------|----------------|-----------|------------|
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 7×20 mm | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6.35 x 15.24mm (Sheet with 528 labels) | | 681033 | LEB-615 | 1 |

Comments

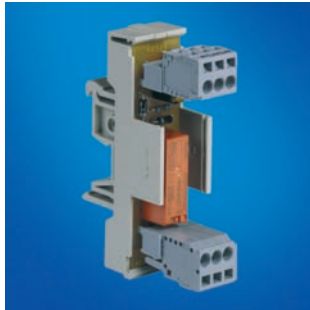
Function description: The module works according to the principle of the current pulse relay. If a voltage signal is applied to terminal B1 or B2, the relay activates and remains in this position. If a further signal is applied after expiration of a debounce time (min 200 ms), the relay is de-energized again. Likewise it is also in the de-energized state after application of the supply voltage (DC 16.8 V - 137.5 V, terminals A1/A2).

Action chart

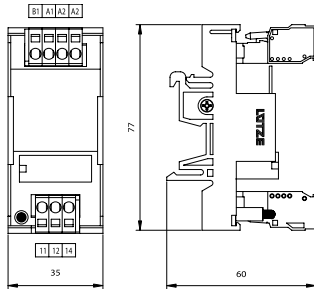


Interface Technology - Varioprint Relay Module

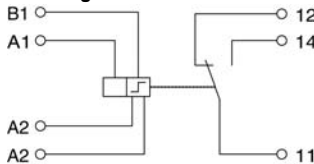
DC current pulse relay with 1 controller input, 1 relay with 1 directional contact
 AC/DC 250 V, 6 A, 1500 VA
 spring terminal, contact material AgNi + 0.15 µm HV



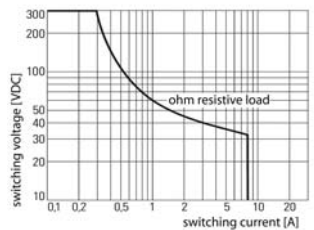
Dimensions



PIN assignment



Limit curve



| Description | Part-No. | Type | PU | |
|---|--|-----------------------|-------------|-------------------|
| Spring terminal | | | | |
| Rated voltage | DC 24 V | 716054 | RPE-6054 | |
| Supply (A1) | | | | |
| | | 716054 | | |
| Input voltage range | 16.8 – 30.0 V | | | |
| Rated current "Relay on" (DC 24V) | 40 mA | | | |
| Rated current "Relay on" (DC 110V) | – mA | | | |
| Rated current "Relay off" (DC 24V) | 10.0 mA | | | |
| Rated current "Relay off" (DC 110V) | – mA | | | |
| Protection device | Reverse diode / Varistor | | | |
| Control side B1 / B2 | | | | |
| Control voltage B1 | DC 24 V (16.8 – 30 V) | | | |
| Control voltage B2 | – | | | |
| Rated current B1 | 20 mA | | | |
| Rated current B2 | – mA | | | |
| Debounce time | ≥650 ms | | | |
| Status indication | LED yellow | | | |
| Protection device | Reverse diode / Varistor | | | |
| Output | | | | |
| Contact type | 1 change over contact | | | |
| Min. switching voltage | AC/DC 1 V | | | |
| Max. switching voltage | AC/DC 50 V | | | |
| Min. switching current | AC/DC 1 mA | | | |
| Max. switching current | AC/DC 3 A | | | |
| Switching capacity AC 15 | 3 A | | | |
| Switching capacity DC 13 | 24 V: 1 A | | | |
| Max. switching capacity | 150 VA | | | |
| Contact material | AgNi + 0,15 µm HV | | | |
| Mechanical service life | >3 × 10 ⁶ operations | | | |
| Switch-on delay | – | | | |
| Switch-off delay | – | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Rated insulation voltage (EN 50178) | 50 V | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 70 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 35.0 x 77.0 x 60.0 mm | | | |
| Weight (kg/piece) | 0.055 | | | |
| Approvals | UL, CSA in preparation | | | |
| Termination | Spring terminal 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 7x20 mm | white | 681311 | BZT 0720 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 6,35 x 15,24mm (Sheet with 528 labels) | | 681033 | LEB-615 | 1 |

Comments

Function description: The module works according to the principle of the current pulse relay. If a High signal (e.g. via a button) is applied to terminal B1 for at least 650 ms, the relay activates and remains in this position. After repeated application of the signal, the relay de-energizes again. To ensure the function of the module, a supply voltage of 24 V DC must be made available at terminal A1.

Action chart

Interface Technology - Microcompact Solid State Relay

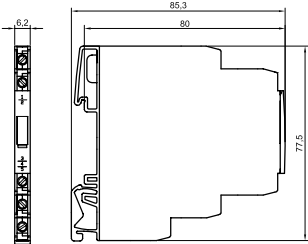
DC Solid State Relay, 3 wire, plus switching

Switching element DC 30 V; 1.7 A; short circuit protection

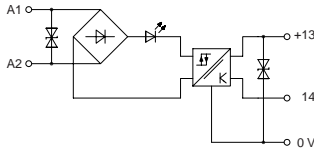
Screw-/ Spring terminal



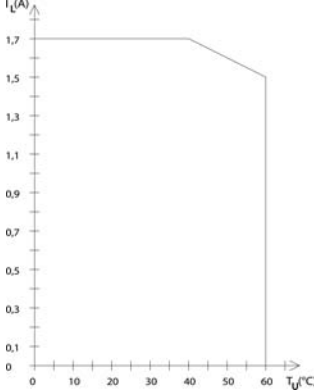
Dimensions



PIN assignment



Derating



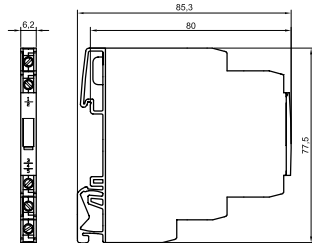
| Description | Part-No. | Type | PU | |
|--|---|-----------------------|-------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 760102 | OT 6-0102 DC 24 V | 3 |
| Spring terminal | | | | |
| Rated voltage | DC 24 V | 761102 | OT 6-1102 DC 24 V | 3 |
| Input | | | | |
| DC 24 V | | | | |
| Input voltage range | 10.0 – 30.0 V | | | |
| Rated current | 7.0 mA | | | |
| Interrupting voltage | <9 V | | | |
| Protection device | Suppressor diode | | | |
| Status indication | LED yellow, short circuit red | | | |
| Rated frequency | – | | | |
| Output | | | | |
| Switching element | Transistor, N/O contact | | | |
| Min. switching voltage | DC 10 V | | | |
| Max. switching voltage | DC 30 V | | | |
| Min. switching current | DC 1 mA | | | |
| Max. switching current | DC 1.7 A (Derating) | | | |
| Inrush current | – | | | |
| Leakage current | – | | | |
| Switch-on delay | 220 µs | | | |
| Switch-off delay | 200 µs | | | |
| Switching frequency | <2 kHz | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Protection device output | Suppressor diode | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 6.2 x 84.0 x 80.0 mm | | | |
| Weight (kg/piece) | 0.030 | | | |
| Approvals | cULus | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB-0411 | 1 |

Interface Technology - Microcompact Solid State Relay

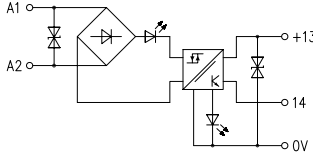
DC Solid State Relay, 3 wire, plus switching
Switching element DC 30 V; 5 A; short circuit protection
Screw-/ Spring terminal



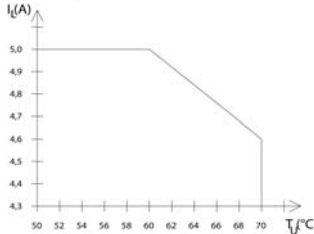
Dimensions



PIN assignment



Derating



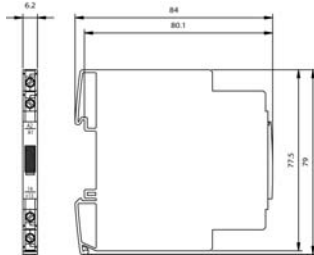
| Description | Part-No. | Type | PU | |
|--|---|-----------------------|-------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 760103 | OT 6-0103 DC 24 V | 3 |
| Spring terminal | | | | |
| Rated voltage | DC 24 V | 761103 | OT 6-1103 DC 24 V | 3 |
| Input | | | | |
| DC 24 V | | | | |
| Input voltage range | 10.0 – 30.0 V | | | |
| Rated current | 7.0 mA | | | |
| Interrupting voltage | <9 V | | | |
| Protection device | Suppressor diode | | | |
| Status indication | LED yellow, short circuit red | | | |
| Rated frequency | – | | | |
| Output | | | | |
| Switching element | Transistor, N/O contact | | | |
| Min. switching voltage | DC 10 V | | | |
| Max. switching voltage | DC 30 V | | | |
| Min. switching current | DC 1 mA | | | |
| Max. switching current | DC 5 A (Derating) | | | |
| Inrush current | – | | | |
| Leakage current | – | | | |
| Switch-on delay | 220 μ s | | | |
| Switch-off delay | 200 μ s | | | |
| Switching frequency | <2 kHz | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Protection device output | Suppressor diode | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 6.2 x 84.0 x 80.0 mm | | | |
| Weight (kg/piece) | 0.030 | | | |
| Approvals | – | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |
| Accesories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB-0411 | 1 |

Interface Technology - Microcompact Solid State Relay

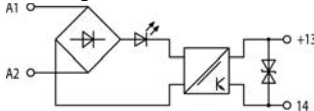
AC/DC Solid State Relay, 2 wire
Switching element DC 30 V; 100 mA; Wide range input
Screw-/ Spring terminal



Dimensions



PIN assignment



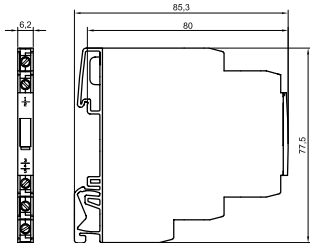
| Description | Part-No. | Type | PU | |
|--|---|-----------------------|---------------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 110–230 V | 760307 | OT 6-0307 AC/DC 110–230 V | 4 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 110–230 V | 761307 | OT 6-1307 AC/DC 110–230 V | 4 |
| Input | | | | |
| AC/DC 110–230 V | | | | |
| Input voltage range | 110.0 – 230.0 V | | | |
| Rated current | 6.0 mA | | | |
| Interrupting voltage | <20 V | | | |
| Protection device | Suppressor diode | | | |
| Status indication | LED yellow | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Switching element | Transistor, N/O contact | | | |
| Min. switching voltage | DC 10 V | | | |
| Max. switching voltage | DC 30 V | | | |
| Min. switching current | DC 1 mA | | | |
| Max. switching current | DC 100 mA | | | |
| Inrush current | – | | | |
| Leakage current | – | | | |
| Switch-on delay | 8 ms | | | |
| Switch-off delay | 10 ms | | | |
| Switching frequency | – | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Protection device output | Suppressor diode | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 0.5 kV _{eff} | | | |
| Safe isolation | Yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 6.2 x 84.0 x 80.0 mm | | | |
| Weight (kg/piece) | 0.030 | | | |
| Approvals | cULus | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4,23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB-0411 | 1 |

Interface Technology - Microcompact Solid State Relay

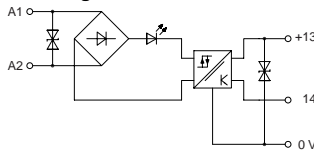
AC/DC Solid State Relay, 3 wire, plus switching
Switching element DC 30 V; 3 A; short circuit protection, wide range input
Screw-/ Spring terminal



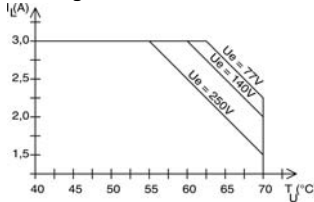
Dimensions



PIN assignment



Derating



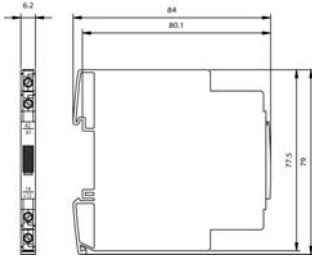
| Description | Part-No. | Type | PU | |
|--|---|-----------------------|----------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | AC/DC 77–250 V | 760705 | OT 6-0705 AC/DC 24 V | 3 |
| Spring terminal | | | | |
| Rated voltage | AC/DC 77–250 V | 761705 | OT 6-1705 AC/DC 24 V | 3 |
| Input | | | | |
| AC/DC 77–250 V | | | | |
| Input voltage range | 77.0 – 250.0 V | | | |
| Rated current | 3.0 mA | | | |
| Interrupting voltage | <25 V | | | |
| Protection device | Suppressor diode | | | |
| Status indication | LED yellow | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Switching element | Transistor, N/O contact | | | |
| Min. switching voltage | DC 10 V | | | |
| Max. switching voltage | DC 30 V | | | |
| Min. switching current | DC 1 mA | | | |
| Max. switching current | DC 3 A (Derating) | | | |
| Inrush current | DC 5 A (1 s) | | | |
| Leakage current | – | | | |
| Switch-on delay | 7 ms | | | |
| Switch-off delay | 60 ms | | | |
| Switching frequency | <10 Hz | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Protection device output | Suppressor diode | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 0.5 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 70 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 6.2 x 84.0 x 80.0 mm | | | |
| Weight (kg/piece) | 0.029 | | | |
| Approvals | cULus | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB-0411 | 1 |

Interface Technology - Microcompact Solid State Relay

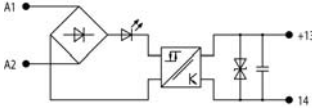
DC Solid State Relay, 2 wire
Switching element DC 48 V; 0.5 A
Screw-/ Spring terminal



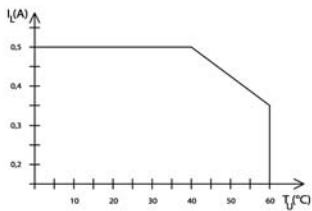
Dimensions



PIN assignment



Derating



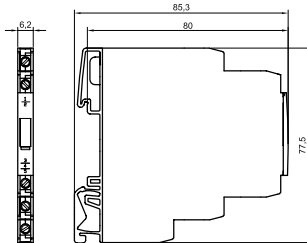
| Description | Part-No. | Type | PU | |
|--|---|-----------------------|-------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 760101 | OT 6-0101 DC 24 V | 10 |
| Spring terminal | | | | |
| Rated voltage | DC 24 V | 761101 | OT 6-1101 DC 24 V | 10 |
| Input | | | | |
| DC 24 V | | | | |
| Input voltage range | 11.0 – 30.0 V | | | |
| Rated current | 18.0 mA | | | |
| Interrupting voltage | <6 V | | | |
| Protection device | Reverse voltage protection | | | |
| Status indication | LED yellow | | | |
| Rated frequency | – | | | |
| Output | | | | |
| Switching element | Transistor, N/O contact | | | |
| Min. switching voltage | DC 6 V | | | |
| Max. switching voltage | DC 48 V | | | |
| Min. switching current | DC 10 mA | | | |
| Max. switching current | DC 0.5 A (Derating) | | | |
| Inrush current | – | | | |
| Leakage current | – | | | |
| Switch-on delay | 2 ms | | | |
| Switch-off delay | 6 ms | | | |
| Switching frequency | max. 50 Hz | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Protection device output | Suppressor diode | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 6.2 x 77.5 x 75.0 mm | | | |
| Weight (kg/piece) | 0.029 | | | |
| Approvals | cULus | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB-0411 | 1 |

Interface Technology - Microcompact Solid State Relay

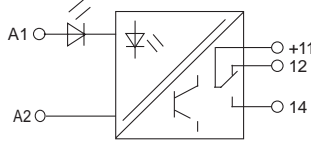
DC Solid State Relay, 3 wire, plus switching
Switching element DC 30 V; 0.5 A; change over contact
Screw terminal



Dimensions

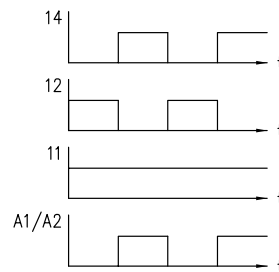


PIN assignment



| Description | Part-No. | Type | PU | |
|--|---|-----------------------|-------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 762083 | OT 6-2083 DC 24 V | |
| Input | | | | |
| DC 24 V | | | | |
| Input voltage range | 10.0 – 40.0 V | | | |
| Rated current | 6.0 mA | | | |
| Interrupting voltage | 11 V/11 V | | | |
| Protection device | Suppressor diode | | | |
| Status indication | LED yellow | | | |
| Rated frequency | – | | | |
| Output | | | | |
| Switching element | Transistor NPN / PNP, change over contact | | | |
| Min. switching voltage | DC 5 V | | | |
| Max. switching voltage | DC 48 V | | | |
| Min. switching current | DC 10 mA | | | |
| Max. switching current | DC 500 mA | | | |
| Inrush current | – | | | |
| Leakage current | – | | | |
| Switch-on delay | 20 µs | | | |
| Switch-off delay | 100 µs | | | |
| Switching frequency | <1 kHz | | | |
| Clearance/creep. dist. (control/load side) | >4.5 mm | | | |
| Protection device output | Suppressor diode | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 3.8 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 6.2 x 84.0 x 80.0 mm | | | |
| Weight (kg/piece) | 0.029 | | | |
| Approvals | – | | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB-0411 | 1 |

Action chart

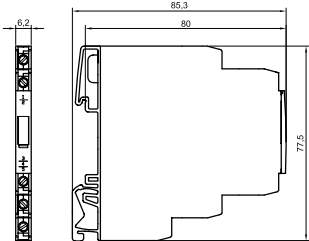


Interface Technology - Microcompact Solid State Relay

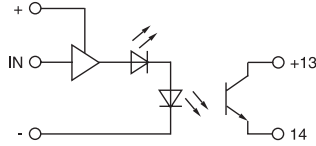
DC Solid State Relay, 2 wire
Switching element DC 48 V; 0.5 A; 20 kHz
Screw terminal



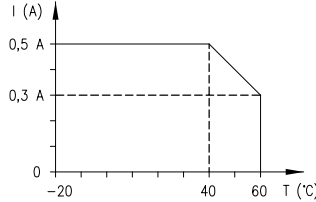
Dimensions



PIN assignment



Derating



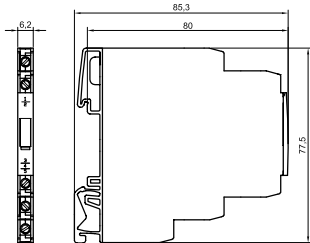
| Description | Part-No. | Type | PU |
|--|--|-----------------------|-------------------|
| Screw terminal | | | |
| Rated voltage | DC 24 V | 762082 | OT 6-2082 DC 24 V |
| Input | | | |
| DC 24 V | | | |
| Input voltage range | 4.2 – 30.0 V | | |
| Rated current | 0.1 mA | | |
| Interrupting voltage | <2.7 V | | |
| Protection device | Suppressor diode | | |
| Status indication | LED yellow | | |
| Rated frequency | – | | |
| Output | | | |
| Switching element | Transistor, N/O contact | | |
| Min. switching voltage | DC 5 V | | |
| Max. switching voltage | DC 48 V | | |
| Min. switching current | DC 10 mA | | |
| Max. switching current | DC 500 mA (Derating) | | |
| Inrush current | – | | |
| Leakage current | – | | |
| Switch-on delay | 12 µs | | |
| Switch-off delay | 12 µs | | |
| Switching frequency | <20 kHz | | |
| Clearance/creep. dist. (contol/load side) | >4.5 mm | | |
| Protection device output | Suppressor diode | | |
| General | | | |
| Housing material | PPE | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 3.8 kV _{eff} | | |
| Safe isolation | yes | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 6.2 x 84.0 x 80.0 mm | | |
| Weight (kg/piece) | 0.029 | | |
| Approvals | – | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | |
| Accessories | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| Tag holder 4x11 mm | white | 681313 | BZT 0411 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB-0411 |
| | | | Pkg. units |
| | | | 5 |
| | | | 100 |
| | | | 1 |
| | | | 1 |

Interface Technology - Microcompact Solid State Relay

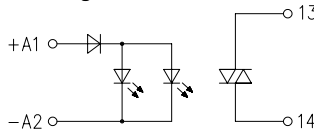
DC Solid State Relay, 2 wire Switching element AC 250 V; 1A Screw terminal



Dimensions



PIN assignment



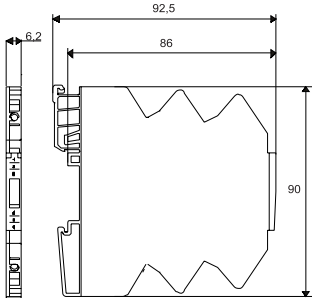
| Description | Part-No. | Type | PU |
|--|--|-----------------------|--------------------|
| Screw terminal | | | |
| Rated voltage | DC 24 V | 762056 | OT 6-2056 AC 230 V |
| Input | | | |
| DC 24 V | | | |
| Input voltage range | 19.2 – 30.0 V | | |
| Rated current | 18.0 mA | | |
| Interrupting voltage | <12 V | | |
| Protection device | Reverse voltage protection | | |
| Status indication | LED yellow | | |
| Rated frequency | – | | |
| Output | | | |
| Switching element | Triac, N/O contact | | |
| Min. switching voltage | AC 18 V | | |
| Max. switching voltage | AC 240 V | | |
| Min. switching current | AC 5 mA | | |
| Max. switching current | AC 1 A | | |
| Inrush current | – | | |
| Leakage current | – | | |
| Switch-on delay | 0.1 ms | | |
| Switch-off delay | 10 ms | | |
| Switching frequency | <20 Hz | | |
| Clearance/creep. dist. (control/load side) | >5.5 mm | | |
| Protection device output | – | | |
| General | | | |
| Housing material | PPE | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | yes | | |
| Operation temperature range | -25 °C – 70 °C | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 6.2 x 84.0 x 80.0 mm | | |
| Weight (kg/piece) | 0.029 | | |
| Approvals | – | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | |
| Accessories | | | |
| | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| tag holder 4x11 mm | white | 681313 | BZT 0411 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB-0411 |
| | | | Pkg. units |
| | | | 5 |
| | | | 100 |
| | | | 1 |
| | | | 1 |

Interface Technology - Microcompact Solid State Relay

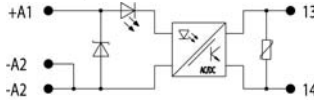
DC Solid State Relay, 2 wire
Switching element AC/DC 250 V; 2 A
Screw-/ Spring terminal



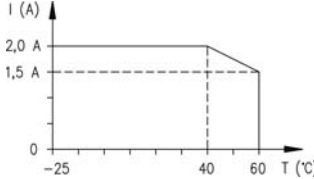
Dimensions



PIN assignment



Derating



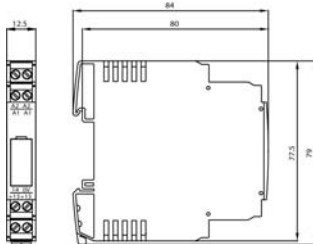
| Description | Part-No. | Type | PU | | | | |
|---|--|-----------------------|-------------------|-------------------|---------------|----------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | DC 24 V | 760107 | OT 7-0107 DC 24 V | 5 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | DC 24 V | 761107 | OT 7-1107 DC 24 V | 5 | | | |
| Input | | | | | | | |
| DC 24 V | | | | | | | |
| Input voltage range | 18.0 – 32.0 V | | | | | | |
| Rated current | 12.0 mA | | | | | | |
| Interrupting voltage | 10 V | | | | | | |
| Protection device | Suppressor diode | | | | | | |
| Status indication | LED green | | | | | | |
| Rated frequency | – | | | | | | |
| Output | | | | | | | |
| Switching element | MosFet, N/O contact | | | | | | |
| Min. switching voltage | AC/DC 2 V | | | | | | |
| Max. switching voltage | AC/DC 253 V | | | | | | |
| Min. switching current | AC/DC 1 mA | | | | | | |
| Max. switching current | AC/DC 2 A (Derating) | | | | | | |
| Inrush current | AC/DC 8 A; 10 ms | | | | | | |
| Leakage current | – | | | | | | |
| Switch-on delay | 0.5 ms | | | | | | |
| Switch-off delay | 0.5 ms | | | | | | |
| Switching frequency | 500 Hz | | | | | | |
| Clearance/creep. dist. (contol/load side) | >4 mm | | | | | | |
| Protection device output | Varistor | | | | | | |
| General | | | | | | | |
| Housing material | PPE | | | | | | |
| IP rating | IP 20 | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| Insulation voltage input/output | 5.0 kV _{eff} | | | | | | |
| Safe isolation | yes | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.030 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Termination | Screw-/spring terminal 0.5–1.5 mm ² | | | | | | |
| Accessories | Colour | Article number | Type | Pkg. units | | | |
| Tag holder 4x11 mm | white | 681313 | BZT -0411 | 100 | | | |
| Isolation plate | | 760809 | TP 7-0809 | 5 | | | |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 | | | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | LEB-0411 | 1 | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Comments | | | | | | | |
| Inductive loads must be wired with a suitable suppressor element! | | | | | | | |

Interface Technology - Microcompact Solid State Relay

DC Solid State Relay, 3 wire, plus switching
Switching element DC 30 V; 5 A; 10 A
Screw-/Spring terminal

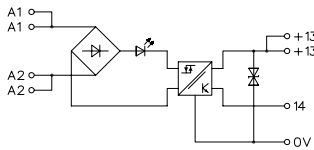


Dimensions

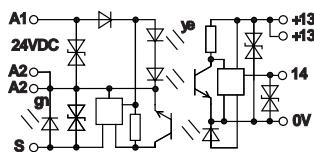


PIN assignment

DC 24 V / 5 A

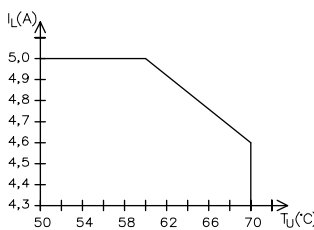


DC 24 V / 10 A

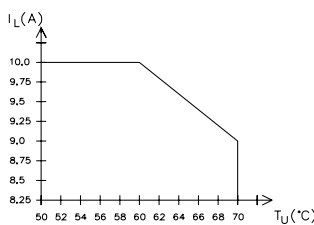


Derating

DC 24 V / 5 A



DC 24 V / 10 A



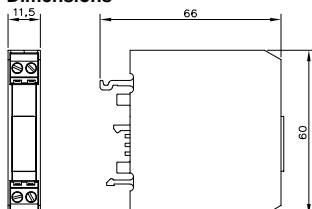
| Description | Part-No. | Type | PU | |
|---|---|---|-------------------|---|
| Screw terminal | | | | |
| Rated voltage | DC 24 V / 5 A | 760105 | OT 6-0105 DC 24 V | 2 |
| | DC 24 V / 10 A | 760708 | OT 6-0708 DC 24 V | 1 |
| Spring terminal | | | | |
| Rated voltage | DC 24 V / 5 A | 761105 | OT 6-1105 DC 24 V | 2 |
| | DC 24 V / 10 A | 761708 | OT 6-1708 DC 24 V | 1 |
| Input | | | | |
| | DC 24 V / 5 A | DC 24 V / 10 A | | |
| Input voltage range | 11.0 – 30.0 V | 16.0 – 30.0 V | | |
| Rated current | 18.0 mA | 22.0 mA | | |
| Interrupting voltage | 11 V/11 V | | | |
| Protection device | Bridge rectifier | Reverse diode, Suppressor diode | | |
| Status indication | LED yellow | LED yellow, Switching current >3 A: LED green | | |
| Rated frequency | – | | | |
| Output | | | | |
| Switching element | Transistor, N/O contact | | | |
| Min. switching voltage | DC 10 V | | | |
| Max. switching voltage | DC 30 V | | | |
| Min. switching current | DC 500 mA | | | |
| Max. switching current | DC 5 A (Derating) | DC 10 A (Derating) | | |
| Inrush current | – | | | |
| Leakage current | <20 µA | | | |
| Switch-on delay | 260 µs | 0.1 ms | | |
| Switch-off delay | 4 µs | 7 ms | | |
| Switching frequency | <500 Hz | <50 Hz | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | |
| Protection device output | Suppressor diode | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 12.5 x 79.0 x 84.0 mm | | | |
| Weight (kg/piece) | 0.049 | | | |
| Approvals | DC 24 V / 5 A : cULus | | | |
| Termination | Screw-/spring terminal 0.25–2.5 mm ² | | | |

Interface Technology - Minicompact Solid State Relay

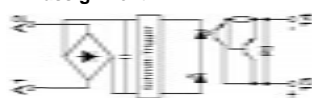
AC/DC Solid State Relay, 2 wire, threshold detector input
 Switching element DC 30 V; 100 mA
 Screw terminal



Dimensions



PIN assignment



| Description | Part-No. | Type | PU |
|-----------------------|-------------|--------|-----------------------|
| Screw terminal | | | |
| Rated voltage | AC/DC 24 V | 731884 | IN 4-1884 AC/DC 24 V |
| | AC/DC 230 V | 731885 | IN 4-1885 AC/DC 230 V |

| Input | AC/DC 24 V | AC/DC 230 V |
|----------------------|------------------|----------------|
| Input voltage range | 17.0 – 30.0 V | 88.0 – 264.0 V |
| Rated current | 4.0 mA | 24.0 mA |
| Interrupting voltage | <6 V | <61 V |
| Protection device | Bridge rectifier | |
| Status indication | LED yellow | |
| Rated frequency | 50–60 Hz | |

| Output | | |
|--|-------------------------|--------|
| Switching element | Transistor, N/O contact | |
| Min. switching voltage | DC 10 V | |
| Max. switching voltage | DC 30 V | |
| Min. switching current | DC 10 mA | |
| Max. switching current | DC 100 mA | |
| Inrush current | DC 1 A (20 ms) | |
| Leakage current | <0.1 mA | |
| Switch-on delay | 1 ms | 20 ms |
| Switch-off delay | 25 ms | 20 ms |
| Switching frequency | <30 Hz | <20 Hz |
| Clearance/creep. dist. (control/load side) | >5.5 mm | |
| Protection device output | Suppressor diode | |

| General | |
|---------------------------------|--|
| Housing material | PPE |
| IP rating | IP 20 |
| Field installation | rail TS 35 (EN 50022) |
| Insulation voltage input/output | 4.0 kV _{eff} |
| Safe isolation | yes |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 80 °C |
| Dimensions (w x h x d) | 11.5 x 60.0 x 67.0 mm |
| Weight (kg/piece) | 0.030 |
| Approvals | AC/DC 24 V / AC/DC 230 V : cULus |
| Termination | Screw terminal: 0.25–2.5 mm ² |

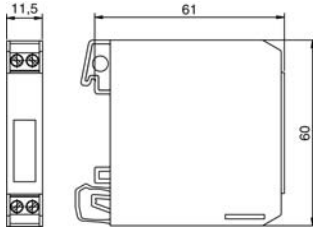
| Accessories | Colour | Article number | Type | Pkg. units |
|--|--------|----------------|-----------|------------|
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| tag holder 9x20 mm | white | 681315 | BZT -0920 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 9 x 20 mm (Sheet with 270 labels) | | 681032 | LEB-0924 | 1 |

Interface Technology - Minicompact Solid State Relay

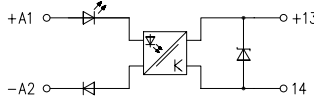
DC Solid State Relay, 2 wire Switching element DC 60 V; 1.5 A Screw terminal



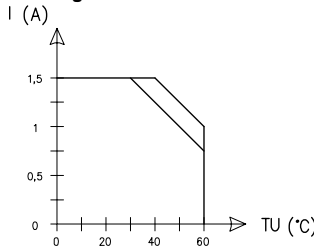
Dimensions



PIN assignment



Derating



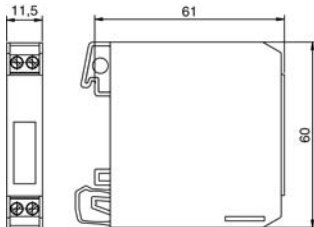
| Description | Part-No. | Type | PU |
|--|--|-----------------------|-------------------|
| Screw terminal | | | |
| Rated voltage | DC 24 V | 730801 | OT 4-0801 DC 24 V |
| Input | | | |
| DC 24 V | | | |
| Input voltage range | 17.0 – 30.0 V | | |
| Rated current | 8.0 mA | | |
| Interrupting voltage | – | | |
| Protection device | Reverse diode | | |
| Status indication | LED yellow | | |
| Rated frequency | – | | |
| Output | | | |
| Switching element | Transistor, N/O contact | | |
| Min. switching voltage | DC 10 V | | |
| Max. switching voltage | DC 60 V | | |
| Min. switching current | DC 10 mA | | |
| Max. switching current | DC 1.5 A (Derating) | | |
| Inrush current | DC 4 A (0.2 s) | | |
| Leakage current | <0.1 mA | | |
| Switch-on delay | 0.1 ms | | |
| Switch-off delay | 0.1 ms | | |
| Switching frequency | <2 kHz | | |
| Clearance/creep. dist. (control/load side) | >5.5 mm | | |
| Protection device output | Suppressor diode | | |
| General | | | |
| Housing material | PPE | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | yes | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 11.5 x 60.0 x 67.0 mm | | |
| Weight (kg/piece) | 0.032 | | |
| Approvals | cULus | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | |
| Accessories | | | |
| | Colour | Article number | Type |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 |
| Tag holder 9x20 mm | white | 681315 | BZT -0920 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 |
| Labels for laser printer 9 x 20 mm (Sheet with 270 labels) | | 681032 | LEB-0924 |
| | | | Pkg. units |
| | | | 5 |
| | | | 100 |
| | | | 1 |
| | | | 1 |

Interface Technology - Minicompact Solid State Relay

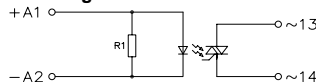
DC Solid State Relay, 2 wire
Switching element AC 250 V; 1.5 A; Zero crossing switch
Screw terminal



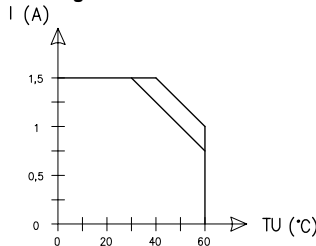
Dimensions



PIN assignment



Derating



| Description | Part-No. | Type | PU | |
|--|--|-----------------------|-------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 731883 | OT 4-1883 DC 24 V | |
| Input | | | | |
| DC 24 V | | | | |
| Input voltage range | 7.0 – 30.0 V | | | |
| Rated current | 12.0 mA | | | |
| Interrupting voltage | – | | | |
| Protection device | Reverse diode | | | |
| Status indication | LED yellow | | | |
| Rated frequency | – | | | |
| Output | | | | |
| Switching element | Triac, N/O contact | | | |
| Min. switching voltage | AC 50 V | | | |
| Max. switching voltage | AC 250 V | | | |
| Min. switching current | AC 20 mA | | | |
| Max. switching current | AC 1.5 A (Derating) | | | |
| Inrush current | AC 30 A (1 s) | | | |
| Leakage current | <5 mA | | | |
| Switch-on delay | 1 ms | | | |
| Switch-off delay | 20 ms | | | |
| Switching frequency | <20 Hz | | | |
| Clearance/creep. dist. (contol/load side) | >8.0 mm | | | |
| Protection device output | Varistor | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 °C – 70 °C | | | |
| Storage temperature range | -25 °C – 70 °C | | | |
| Dimensions (w x h x d) | 11.5 x 60.0 x 67.0 mm | | | |
| Weight (kg/piece) | 0.030 | | | |
| Approvals | cULus in preparation | | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |
| Tag holder 9x20 mm | white | 681315 | BZT -0920 | 100 |
| Labels for laser printer A4 unpunched | | 681031 | LEB-A4 | 1 |
| Labels for laser printer 9 x 20 mm (Sheet with 270 labels) | | 681032 | LEB-0924 | 1 |

Interface Technology - Varioprint Solid State Relay

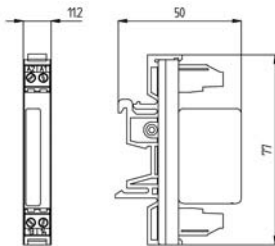
DC Solid State Relay, 2 wire

Switching element AC 280 V (380 V); 5 A, zero crossing switch

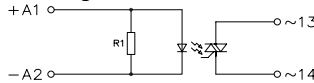
Screw terminal



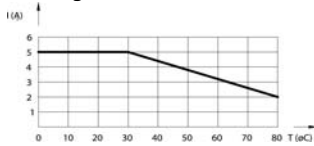
Dimensions



PIN assignment



Derating



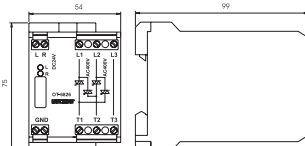
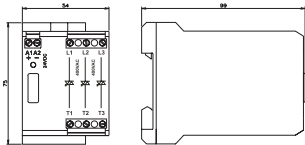
| Description | Part-No. | Type | PU | |
|--|--|-----------------------|------------------|-------------------|
| Screw terminal | | | | |
| Rated voltage | DC 24 V | 716051 | OTE-6051 DC 24 V | 5 |
| | DC 24 V | 716180 | OTE-6180 DC 24 V | 30 |
| Input | | | | |
| DC 24 V | | | | |
| Input voltage range | 15.0 – 32.0 V | | | |
| Rated current | 12.0 mA | | | |
| Interrupting voltage | 1 V | | | |
| Protection device | – | | | |
| Status indication | – | | | |
| Rated frequency | 50–60 Hz | | | |
| Output | | | | |
| Switching element | | | | |
| Triac, N/O contact | | | | |
| Min. switching voltage | AC 48 V | | AC 12 V | |
| Max. switching voltage | AC 380 V | | AC 280 V | |
| Min. switching current | AC 100 mA | | | |
| Max. switching current | AC 5 A (Derating) | | | |
| Inrush current | AC 250 A (10 ms) | | | |
| Leakage current | <0.1 mA | | | |
| Switch-on delay | 10 ms | | | |
| Switch-off delay | 10 ms | | | |
| Switching frequency | <20 Hz | | | |
| Clearance/creep. dist. (control/load side) | >9.8 mm | | | |
| Protection device output | – | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | Yes | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w × h × d) | 11.2 × 77.0 × 50.0 mm | | | |
| Weight (kg/piece) | 0.060 | | | |
| Approvals | – | | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Jumper comb 24pole, 26A | blue | 760801 | BK 6-0801 | 5 |

Interface Technology - Solid State Relay

DC Solid State Relay, 3phasig Switching element AC 400 V; 3.4 A / 3.8 A, Zero crossing switch Screw terminal

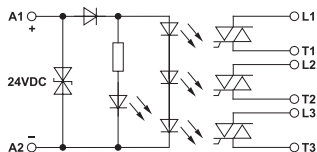


Dimensions

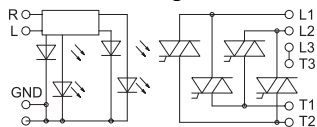


PIN assignment

DC 24 V / Protection



DC 24 V / Reversing contractor



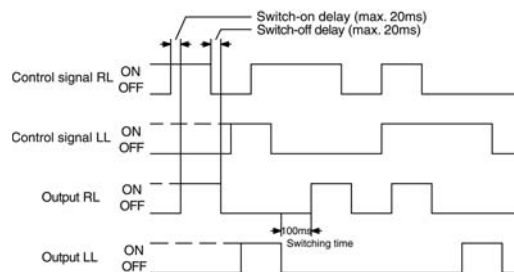
| Description | Part-No. | Type | PU | |
|-----------------------|--------------------------------|--------|-----------------|---|
| Screw terminal | | | | |
| Rated voltage | DC 24 V / Protection | 716825 | OT-6825 DC 24 V | 1 |
| | DC 24 V / Reversing contractor | 716826 | OT-6826 DC 24 V | 1 |

| Input | DC 24 V / Protection | DC 24 V / Reversing contractor |
|----------------------|----------------------|--------------------------------|
| Input voltage range | 17.0 – 30.0 V | |
| Rated current | 25.0 mA | |
| Interrupting voltage | <8 V | |
| Protection device | Supressor diode | |
| Status indication | LED green | |
| Rated frequency | – | |

| Output | DC 24 V / Protection | DC 24 V / Reversing contractor |
|---|------------------------|--------------------------------|
| Switching element | Thyristor, N/O contact | |
| Min. switching voltage | AC 24 V | |
| Max. switching voltage | AC 400 V | |
| Min. switching current | AC 100 mA | |
| Max. switching current | AC 3.4 A | AC 3.8 A |
| Inrush current | AC 120 A (10 ms) | |
| Leakage current | <1.7 mA | |
| Switch-on delay | 5.5 ms | 115 ms |
| Switch-off delay | 10 ms | |
| Switching frequency | <10 HZ | <5 Hz |
| Clearance/creep. dist. (contol/load side) | > 5.5 mm | |
| Protection device output | Varistor | Varistor, RC combination |

| General | DC 24 V / Protection | DC 24 V / Reversing contractor |
|---------------------------------|---|--------------------------------|
| Housing material | Plastic | |
| IP rating | IP 20 | |
| Field installation | rail TS 35 (EN 50022) | |
| Insulation voltage input/output | 0.5 kV _{eff} | |
| Safe isolation | yes | |
| Operation temperature range | -25 °C – 55 °C | |
| Storage temperature range | -40 °C – 80 °C | |
| Dimensions (w x h x d) | 54.0 x 99.0 x 75.0 mm | |
| Weight (kg/piece) | 0.285 | |
| Approvals | cULus, GL in preparation | |
| Termination | Screw terminal: 0.5–4.0 mm ² | |

Action chart



Interface Technology - Solid State Relay

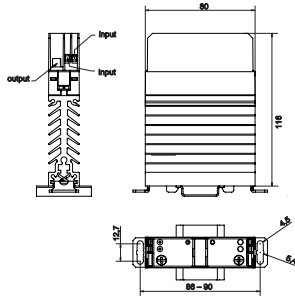
DC Solid State Relay, 2 wire

Switching element AC 6600 V; 25 A; Zero crossing switch

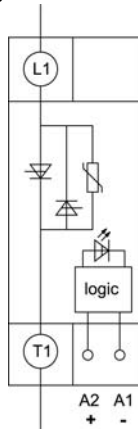
Screw terminal



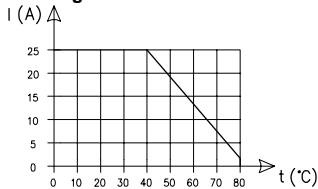
Dimensions



PIN assignment



Derating



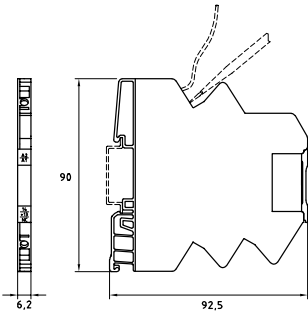
| Description | Part-No. | Type | PU |
|--|--|--------|-----------------|
| Screw terminal | | | |
| Rated voltage | DC 24 V / 25 A | 716080 | OT-6080 DC 24 V |
| Input | | | |
| DC 24 V / 25 A | | | |
| Input voltage range | 4.0 – 32.0 V | | |
| Rated current | 10.0 mA | | |
| Interrupting voltage | 2 V | | |
| Protection device | – | | |
| Status indication | LED green | | |
| Rated frequency | – | | |
| Output | | | |
| Switching element | Thyristor, N/O contact | | |
| Min. switching voltage | AC 48 V | | |
| Max. switching voltage | AC 660 V | | |
| Min. switching current | AC 100 mA | | |
| Max. switching current | AC 25 A (Derating) | | |
| Inrush current | AC 250 A (10 ms) | | |
| Leakage current | <1 mA | | |
| Switch-on delay | 10 ms | | |
| Switch-off delay | 10 ms | | |
| Switching frequency | <10 Hz | | |
| Clearance/creep. dist. (control/load side) | – | | |
| Protection device output | Varistor | | |
| General | | | |
| Housing material | Plastic, flame resistant according to UL-94-V0 | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Safe isolation | yes | | |
| Operation temperature range | -25 °C – 70 °C | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 22.5 x 116.0 x 80.0 mm | | |
| Weight (kg/piece) | 0.260 | | |
| Approvals | – | | |
| Termination | Screw terminal: 0.25–4.0 mm ² | | |

Interface Technology - Microcompact Solid State Relay

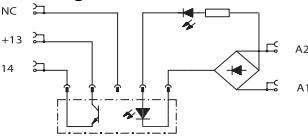
AC/DC Solid State Relay, 2 wire, pluggable Switching element DC 30 V; 3 A Screw-/Spring terminal



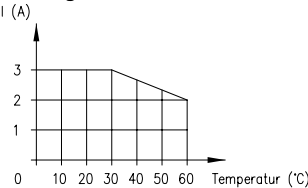
Dimensions



PIN assignment



Derating



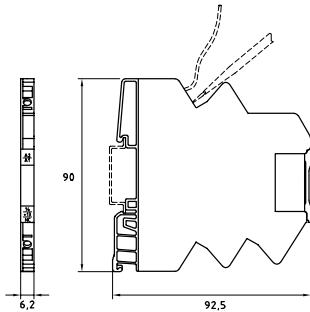
| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|----------------------|-------------------------|---------------|-------------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 760311 | OT 7-0311 AC/DC 24 V | 5 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 761311 | OT 7-1311 AC/DC 24 V | 5 | | | |
| Input | | | | | | | |
| AC/DC 24 V | | | | | | | |
| Input voltage range | 16.8 – 30.0 V | | | | | | |
| Rated current | 15.0 mA | | | | | | |
| Interrupting voltage | <2.4 V | | | | | | |
| Protection device | Bridge rectifier | | | | | | |
| Status indication | LED yellow | | | | | | |
| Rated frequency | 50–60 Hz | | | | | | |
| Output | | | | | | | |
| Switching element | Transistor, N/O contact | | | | | | |
| Min. switching voltage | DC 0.5 V | | | | | | |
| Max. switching voltage | DC 30 V | | | | | | |
| Min. switching current | DC 10 mA | | | | | | |
| Max. switching current | DC 3 A (Derating) | | | | | | |
| Inrush current | – | | | | | | |
| Leakage current | – | | | | | | |
| Switch-on delay | 3 ms | | | | | | |
| Switch-off delay | 4 ms | | | | | | |
| Switching frequency | <100 Hz | | | | | | |
| Clearance/creep. dist. (contol/load side) | – | | | | | | |
| Protection device output | – | | | | | | |
| General | | | | | | | |
| Housing material | PPE | | | | | | |
| IP rating | IP 20 | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| Insulation voltage input/output | 2.5 kV _{eff} | | | | | | |
| Safe isolation | yes | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.035 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Termination | Screw-/spring terminal 0.5–1.5 mm ² | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Accessories | Colour | Article number | | Type | | Pkg. units | |
| SSR-module | | 768009 | | SSR-DC 12 V/DC 30 V; 3A | | 20 | |
| Tag holder 4x11 mm | white | 681313 | | BZT -0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB-A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB-0411 | | 1 | |

Interface Technology - Microcompact Solid State Relay

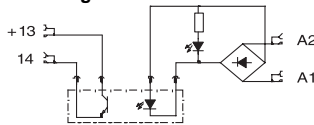
DC Solid State Relay, 2 wire, pluggable
Switching element DC 48 V; 100 mA
Screw-/Spring terminal



Dimensions



PIN assignment



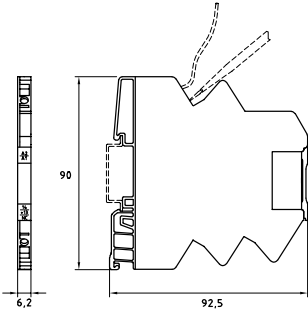
| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|-------------------|---------------------------|---------------|-------------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | DC 24 V | 760108 | OT 7-0108 DC 24 V | 5 | | | |
| Spring terminal | | | | | | | |
| Rated voltage | DC 24 V | 761108 | OT 7-1108 DC 24 V | 5 | | | |
| Input | | | | | | | |
| DC 24 V | | | | | | | |
| Input voltage range | 18.0 – 30.0 V | | | | | | |
| Rated current | 10.0 mA | | | | | | |
| Interrupting voltage | <10 V | | | | | | |
| Protection device | Bridge rectifier | | | | | | |
| Status indication | LED yellow | | | | | | |
| Rated frequency | – | | | | | | |
| Output | | | | | | | |
| Switching element | Transistor, N/O contact | | | | | | |
| Min. switching voltage | DC 5 V | | | | | | |
| Max. switching voltage | DC 54 V | | | | | | |
| Min. switching current | DC 1 mA | | | | | | |
| Max. switching current | DC 100 mA | | | | | | |
| Inrush current | – | | | | | | |
| Leakage current | – | | | | | | |
| Switch-on delay | 5 ms | | | | | | |
| Switch-off delay | 10 ms | | | | | | |
| Switching frequency | <100 Hz | | | | | | |
| Clearance/creep. dist. (control/load side) | >5.5 mm | | | | | | |
| Protection device output | – | | | | | | |
| General | | | | | | | |
| Housing material | PPE | | | | | | |
| IP rating | IP 20 | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| Insulation voltage input/output | 2.5 kV _{eff} | | | | | | |
| Safe isolation | yes | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.035 | | | | | | |
| Approvals | cULus in preparation | | | | | | |
| Termination | Screw-/spring terminal 0.5–1.5 mm ² | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Accessories | Colour | Article number | | Type | | Pkg. units | |
| SSR-module | | 768011 | | SSR-DC 24 V/ DC 48V; 0.1A | | 20 | |
| Tag holder 4x11 mm | white | 681313 | | BZT -0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB-A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB-0411 | | 1 | |

Interface Technology - Microcompact Solid State Relay

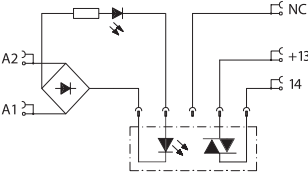
AC/DC Solid State Relay, 2 wire, pluggable
Switching element AC 275 V; 750 mA
Screw-/Spring terminal



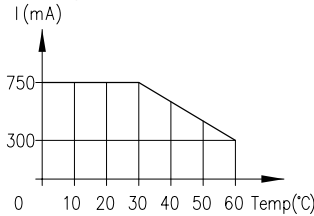
Dimensions



PIN assignment



Derating



| Description | Part-No. | Type | PU | | | | |
|--|--|-----------------------|----------------------|------------------------------|---------------|-------------------|-------------------|
| Screw terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 760691 | OT 7-0691 AC/DC 24 V | | | | |
| Spring terminal | | | | | | | |
| Rated voltage | AC/DC 24 V | 761691 | OT 7-1691 AC/DC 24 V | | | | |
| Input | | | | | | | |
| AC/DC 24 V | | | | | | | |
| Input voltage range | 16.8 – 30.0 V | | | | | | |
| Rated current | 14.0 mA | | | | | | |
| Interrupting voltage | 11 V/11 V | | | | | | |
| Protection device | Bridge rectifier | | | | | | |
| Status indication | LED yellow | | | | | | |
| Rated frequency | 50-60 Hz | | | | | | |
| Output | | | | | | | |
| Switching element | Triac, N/O contact | | | | | | |
| Min. switching voltage | AC 12 V | | | | | | |
| Max. switching voltage | AC 275 V | | | | | | |
| Min. switching current | AC 5 mA | | | | | | |
| Max. switching current | AC 750 mA (Derating) | | | | | | |
| Inrush current | 80 A (10 ms) | | | | | | |
| Leakage current | 1.5 mA | | | | | | |
| Switch-on delay | 10 ms | | | | | | |
| Switch-off delay | 10 ms | | | | | | |
| Switching frequency | 50 Hz | | | | | | |
| Clearance/creep. dist. (contol/load side) | >5.5 mm | | | | | | |
| Protection device output | - | | | | | | |
| General | | | | | | | |
| Housing material | PPE | | | | | | |
| IP rating | IP 20 | | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | | | | |
| Safe isolation | yes | | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | | | |
| Dimensions (w x h x d) | 6.2 x 90.0 x 92.5 mm | | | | | | |
| Weight (kg/piece) | 0.030 | | | | | | |
| Approvals | cULus | | | | | | |
| Termination | Screw-/spring terminal 0.5–1.5 mm ² | | | | | | |
| Accessories | Colour | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole | Pkg. units |
| Jumper comb 6A | red | 762802 | 762805 | 762812 | 762822 | 762832 | 5 |
| Jumper comb 6A | white | 762803 | 762806 | 762813 | 762823 | 762833 | 5 |
| Jumper comb 6A | blue | 762804 | 762807 | 762814 | 762824 | 762834 | 5 |
| Accessories | Colour | Article number | | Type | | Pkg. units | |
| SSR-module | | 768010 | | SSR-DC 12 V/AC 275 V; 0.75 A | | 20 | |
| tag holder 4x11 mm | white | 681313 | | BZT -0411 | | 100 | |
| Isolation plate | | 760809 | | TP 7-0809 | | 5 | |
| Labels for laser printer A4 unpunched | | 681031 | | LEB-A4 | | 1 | |
| Labels for laser printer 4.23 x 11 mm (Sheet with 1056 labels) | | 681034 | | LEB-0411 | | 1 | |

2. Power Supplies

DRA480

LVTZE 


TÜV
Rheinland
Product Safety

BAUART
GEPRÜFT
TYPE
APPROVED


LISTE
IND.COM
E1963
2JF4

115/230 VAC 7/3.5 A 47-63 Hz

 N L

48 VDC
DC ON

parallel
single


Vout Adj

NO 

LVTZE 

Power Supply · Overview



60W - 360W



10W - 18W



30W, 60W



120W



240W



480W, 960W

Power Supply Unit, regulated

| Power | | | | | | | | | Input | | | | | Output (A) | | | | | Connection | | | Art.-Number | Type | Page | |
|-------|-----|-----|-----|-----|-----|------|------|------|-------|----------------|-----------------|----------------|-----------------|--------------------|------|------|------|------|------------|--------------------|----------------|-----------------|--------|---------------|------|
| 10W | 15W | 18W | 30W | 50W | 60W | 120W | 240W | 480W | 960W | AC 90 ... 265V | AC 170 ... 264V | AC 93 ... 132V | AC 186 ... 264V | AC 3x 340 ... 576V | 5V | 12V | 15V | 24V | 48V | screw term. plugg. | screw terminal | spring terminal | | | |
| • | | | | | | | | | | • | | | | | 2 | | | | | • | | | 728761 | DRA10-05A | 2.3 |
| • | | | | | | | | | | • | | | | | 0,84 | | | | | • | | | 728766 | DRA10-12A | 2.3 |
| • | | | | | | | | | | • | | | | | 2 | | | | | • | | | 722761 | DRA10-5 | 2.4 |
| • | | | | | | | | | | • | | | | | 0,84 | | | | | • | | | 722766 | DRA10-12 | 2.4 |
| • | | | | | | | | | | • | | | | | | 0,67 | | | | • | | | 722773 | DRA10-15 | 2.4 |
| • | | | | | | | | | | • | | | | | | | 0,42 | | | • | | | 722751 | DRA10-24 | 2.4 |
| | • | | | | | | | | | • | | | | | 3 | | | | | • | | | 722762 | DRA18-5 | 2.5 |
| | • | | | | | | | | | • | | | | | 3 | | | | | • | | | 728762 | DRA18-5A | 2.5 |
| | | • | | | | | | | | • | | | | | 1,5 | | | | | • | | | 722767 | DRA18-12 | 2.6 |
| | | • | | | | | | | | • | | | | | | 1,2 | | | | • | | | 722774 | DRA18-15 | 2.6 |
| | | • | | | | | | | | • | | | | | | | 0,75 | | | • | | | 722752 | DRA18-24 | 2.6 |
| | | | • | | | | | | | • | | | | | 6 | | | | | • | | | 722763 | DRA30-5A | 2.7 |
| | | | • | | | | | | | • | | | | | 2,5 | | | | | • | | | 722768 | DRA30-12A | 2.7 |
| | | | • | | | | | | | • | | | | | | | 1,25 | | | • | | | 722753 | DRA30-24A | 2.7 |
| | | | • | | | | | | | • | | | | | | | | 0,63 | | • | | | 722775 | DRA30-48A | 2.7 |
| | | | • | | | | | | | • | | | | | 6 | | | | | • | | | 728763 | DRA30-5 | 2.8 |
| | | | • | | | | | | | • | | | | | 2,5 | | | | | • | | | 728768 | DRA30-12 | 2.8 |
| | | | • | | | | | | | • | | | | | | | 1,25 | | | • | | | 728753 | DRA30-24 | 2.8 |
| | | | • | | | | | | | • | | | | | | | | 0,63 | | • | | | 728775 | DRA30-48 | 2.8 |
| | | | | • | | | | | | • | | | | | 2 | 2 | 2 | | | • | | | 716213 | NGP 24/2-6213 | 2.17 |
| | | | | • | | | | | | • | | | | | 10 | | | | | • | | | 722764 | DRA60-5A | 2.9 |
| | | | | • | | | | | | • | | | | | 10 | | | | | • | | | 728764 | DRA60-5 | 2.9 |
| | | | | | • | | | | | • | | | | | 5 | | | | | • | | | 728769 | DRA60-12 | 2.10 |
| | | | | | • | | | | | • | | | | | | | 2,5 | | | • | | | 728754 | DRA60-24 | 2.10 |
| | | | | | • | | | | | • | | | | | | | | 1,25 | | • | | | 728776 | DRA60-48 | 2.10 |
| | | | | | • | | | | | • | | | | | 5 | | | | | • | | | 722769 | DRA60-12A | 2.11 |
| | | | | | • | | | | | • | | | | | | | 2,5 | | | • | | | 722754 | DRA60-24A | 2.11 |
| | | | | | • | | | | | • | | | | | | | | 1,25 | | • | | | 722776 | DRA60-48A | 2.11 |
| | | | | | | • | | | | • | | | | | 10 | | | | | • | | | 722770 | DRAN 120-12B | 2.12 |
| | | | | | | • | | | | • | | | | | | | 5 | | | • | | | 722758 | DRAN 120-24B | 2.12 |
| | | | | | | • | | | | • | | | | | | | | 2,5 | | • | | | 722777 | DRAN 120-48B | 2.12 |
| | | | | | | | • | | | • | | | | | | | 10 | | | • | | | 722759 | DRA240-24B | 2.13 |
| | | | | | | | • | | | • | | | | | | | | 5 | | • | | | 722778 | DRA240-48B | 2.13 |
| | | | | | | | • | | | • | | | | | | | 10 | | | • | | | 722781 | DRA240-24A | 2.13 |
| | | | | | | | | • | | • | | | | | | | 20 | | | • | | | 728782 | DRA480-24B | 2.14 |
| | | | | | | | | • | | • | | | | | | | 20 | | | • | | | 722782 | DRA480-24A | 2.14 |
| | | | | | | | | • | | • | | | | | | | | 10 | | • | | | 722779 | DRA480-48A | 2.14 |
| | | | | | | | | • | | • | | | | | | | 20 | | | • | | | 722805 | WRA 480-24 | 2.15 |
| | | | | | | | | • | | • | | | | | | | | 10 | | • | | | 722809 | WRA 480-48 | 2.15 |
| | | | | | | | | • | | • | | | | | | | 40 | | | • | | | 722806 | WRA 960-24 | 2.16 |
| | | | | | | | | • | | • | | | | | | | 20 | | | • | | | 722810 | WRA 960-48 | 2.16 |

Power Supply Unit, unregulated

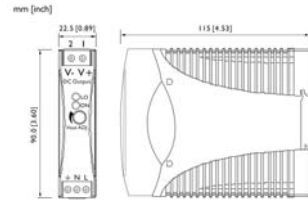
| Power | | | | | | Input | | | Output (A) | | | | | Connection | | | Art.-No. | Type | Page | | |
|-------|-----|------|------|------|------|----------------------|----------------------|----------------------|------------|-----|-----|-----|-----|--------------------|----------------|-----------------|----------|------|--------|----------------|------|
| 60W | 72W | 120W | 144W | 240W | 360W | AC 115V (104...196V) | AC 230V (207...244V) | AC 400V (360...424V) | 5V | 12V | 15V | 24V | 48V | screw term. plugg. | screw terminal | spring terminal | | | | | |
| • | | | | | | • | • | • | | | | | 2,5 | | | | • | | 722962 | NG 24/2,5-2962 | 2.18 |
| | | • | | | | • | • | • | | | | | 5 | | | | • | | 722963 | NG 24/5-2963 | 2.18 |
| | | | • | | | • | • | • | | | | | 10 | | | | • | | 722972 | NG 24/10-2972 | 2.18 |
| | | | | • | | • | • | • | | | | | 15 | | | | • | | 722973 | NG 24/15-2973 | 2.18 |
| | • | | | | | • | • | • | | | | | 3,0 | | | | • | | 722620 | NG 24/3-2620 | 2.19 |
| | | • | | | | • | • | • | | | | | 6,0 | | | | • | | 722621 | NG 24/6-2621 | 2.19 |
| | | | • | | | • | • | • | | | | | 10 | | | | • | | 722622 | NG 24/10-2622 | 2.19 |

Power supply - regulated, 10 W

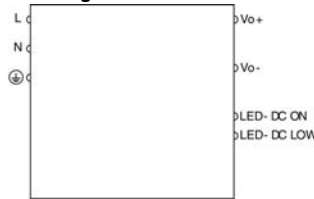
Primary switchmode power supply, Single-phase, Class 2
Input: Wide range input AC 90 V - 265 V; DC 120 V - 370 V
Output: 5 V / 12 V - adjustable



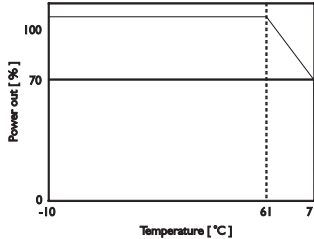
Dimensions



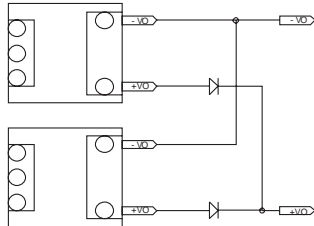
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|-----------------|--------|------------|---|
| Screw terminal | | | | |
| Output voltage/current | DC 5 V; 2 A | 728761 | DRA 10-05A | 1 |
| | DC 12 V; 0.84 A | 728766 | DRA 10-12A | 1 |

| Input | DRA 10-05A | DRA 10-12A |
|--------------------------------|--|------------|
| Rated voltage | AC 100–240 V | |
| Operation voltage range | AC 90–265 V / DC 120–370 V | |
| Line frequency | 47 – 63 Hz | |
| Rated current | $V_{in}=115\text{ V}$; AC: 120 mA / $V_{in}=230\text{ V}$; AC: 70 mA | |
| Inrush current | $V_{in}=115\text{ V}$; AC: 10 A / $V_{in}=230\text{ V}$; AC: 18 mA | |
| Input fuse | T2A / AC 250 V internal | |
| Power Factor Correction P.F.C. | – | |

| Output | DRA 10-05A | DRA 10-12A |
|-------------------------------------|--|-------------|
| Rated voltage output | DC 5 V | DC 12 V |
| Rated current output | 2 A | 0.84 A |
| Voltage trim range | 4.5–5.75 V | 10.8–13.8 V |
| Accuracy | ±1 % | |
| Line regulation | ±1 % | |
| Load regulation | ±2 % | |
| Transient recovery time | 300 μs | |
| Temperature coefficient | ±0.02 % / °C | |
| Ripple & Noise | 50 mV | |
| Hold up time | $V_{in}=115\text{ V}$: 25 ms / $V_{in}=230\text{ V}$: 100 ms | |
| Status indication DC ON (LED green) | ≥4.5 V | ≥10.8 V |
| Status indication DC LOW (LED red) | <3.75–4.50 V | <9–10.8 V |
| Parallel mode | with external diodes | |
| Efficiency | 73 % | 75 % |

| | |
|-------------------------------|-------------|
| Rated over load protection | 110–135 % |
| Over voltage protection | 125–145 % |
| Short circuit characteristics | Hiccup-mode |

| General | |
|-----------------------------------|---|
| Switching frequency | min. 100 kHz |
| Insulation voltage input/output | 3.0 kV _{eff} |
| Insulation resistance at DC 500 V | 100 MΩ |
| Operation temperature range | -10°C – 70°C (Derating) |
| Derating | -3% / °C starting at 61°C |
| Storage temperature range | -25°C – 85°C |
| M.T.B.F. | 210000 h |
| Relative humidity | 20–95 % RH |
| Dimensions (w × h × d) | 22.5 × 90.0 × 115.0 mm |
| Cooling | Air convection |
| Housing material | Plastic |
| Field installation | rail TS 35 (EN 50022) |
| Installation position | vertical |
| IP rating | IP 20 |
| Protection class | 2 |
| Weight (kg/piece) | 0.120 |
| Termination | Screw terminal: 0.2–2.0 mm ² |
| Approvals | UL: UL 508 listed; cUL: UL 60950-1, UL 1310 Class 2; TÜV: EN 60950-1; CE: EN 50081-1 / EN 55022 Class B, EN 61000-3-2, EN 601000-3-3, EN 50082-1 / EN 55024 |

| Monitoring | |
|---------------------|---------------|
| DC ON Control (Rdy) | LED green/red |
| Switching voltage | – |
| Switching current | – |
| Switching capacity | – |
| Insulation voltage | – |

Terminal connexion

| Description | Description |
|-------------|-------------------|
| V+ | Output terminal + |
| V- | Output terminal - |
| PE | PE- connection |
| N | input terminal |
| L | input terminal |

Power supply - regulated, 10 W

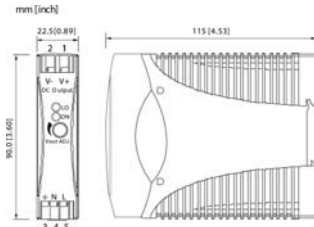
Primary switchmode power supply, Single-phase, Class 2

Input: Wide range input AC 90 V - 265 V; DC 120 V - 370 V

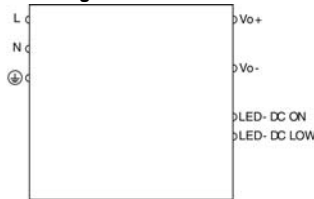
Output: 5 V / 12 V / 15 V / 24 V - adjustable



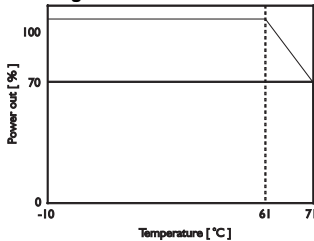
Dimensions



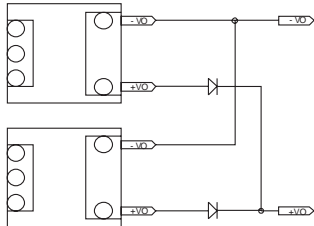
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|-----------------|--------|-----------|---|
| Spring terminal | | | | |
| Output voltage/current | DC 5 V; 2 A | 722761 | DRA 10-05 | 1 |
| | DC 12 V; 0.84 A | 722766 | DRA 10-12 | 1 |
| | DC 15 V; 0.67 A | 722773 | DRA 10-15 | 1 |
| | DC 24 V; 0.42 A | 722751 | DRA 10-24 | 1 |

| Input | DRA 10-05 | DRA 10-12 | DRA 10-15 | DRA 10-24 |
|--------------------------------|--|--------------|-----------|-----------|
| Rated voltage | | AC 100–240 V | | |
| Operation voltage range | AC 90–265 V / DC 120–370 V | | | |
| Line frequency | 47 – 63 Hz | | | |
| Rated current | $V_{in}=115\text{ V}$; AC: 120 mA / $V_{in}=230\text{ V}$; AC: 70 mA | | | |
| Inrush current | $V_{in}=115\text{ V}$; AC: 10 A / $V_{in}=230\text{ V}$; AC: 18 mA | | | |
| Input fuse | T2A / AC 250 V internal | | | |
| Power Factor Correction P.F.C. | - | | | |

| Output | DRA 10-05 | DRA 10-12 | DRA 10-15 | DRA 10-24 |
|-------------------------|--------------|-------------|--------------|-------------|
| Rated voltage output | DC 5 V | DC 12 V | DC 15 V | DC 24 V |
| Rated current output | 2 A | 0.84 A | 0.67 A | 0.42 A |
| Voltage trim range | 4.5–5.75 V | 10.8–13.8 V | 13.5–17.25 V | 21.6–28.8 V |
| Accuracy | ±1 % | | | |
| Line regulation | ±1 % | | | |
| Load regulation | ±2 % | | | |
| Transient recovery time | 300 µs | | | |
| Temperature coefficient | ±0.02 % / °C | | | |
| Ripple & Noise | 50 mV | | | |

| | | | | |
|-------------------------------------|--|-----------|---------------|------------|
| Hold up time | $V_{in}=115\text{ V}$: 25 ms / $V_{in}=230\text{ V}$: 100 ms | | | |
| Status indication DC ON (LED green) | ≥4.5 V | ≥10.8 V | ≥13.5 V | ≥21.6 V |
| Status indication DC LOW (LED red) | <3.75–4.50 V | <9–10.8 V | <11.25–13.5 V | <18–21.6 V |
| Parallel mode | with external diodes | | | |
| Efficiency | 73 % | 75 % | 76 % | 77 % |
| Rated over load protection | 110–135 % | | | |
| Over voltage protection | 125–145 % | | | |
| Short circuit characteristics | Hiccup-mode | | | |

| General | |
|-----------------------------------|---|
| Switching frequency | min. 100 kHz |
| Insulation voltage input/output | 3.0 kV _{eff} |
| Insulation resistance at DC 500 V | 100 MΩ |
| Operation temperature range | -10°C – 70°C (Derating) |
| Derating | -3% / °C starting at 61°C |
| Storage temperature range | -25°C – 85°C |
| M.T.B.F. | 210000 h |
| Relative humidity | 20–95 % RH |
| Dimensions (w x h x d) | 22.5 x 90.0 x 115.0 mm |
| Cooling | Air convection |
| Housing material | Plastic |
| Field installation | rail TS 35 (EN 50022) |
| Installation position | vertical |
| IP rating | IP 20 |
| Protection class | 2 |
| Weight (kg/piece) | 0.120 |
| Termination | Spring terminal: 0.2–2.0 mm ² |
| Approvals | UL: UL 508 listed; cUL: UL 60950-1, UL 1310 Class 2; TÜV: EN 60950-1; CE: EN 50081-1 / EN 55022 Class B, EN 61000-3-2, EN 601000-3-3, EN 50082-1 / EN 55024 |

| Monitoring | |
|---------------------|---------------|
| DC ON Control (Rdy) | LED green/red |
| Switching voltage | - |
| Switching current | - |
| Switching capacity | - |
| Insulation voltage | - |

Terminal connexion

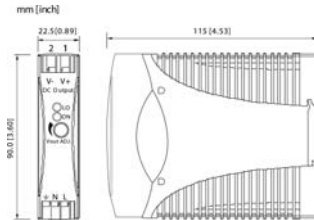
| Description | Description |
|-------------|-------------------|
| V+ | Output terminal + |
| V- | Output terminal - |
| PE | PE- connection |
| N | input terminal |
| L | input terminal |

Power supply - regulated, 15 W

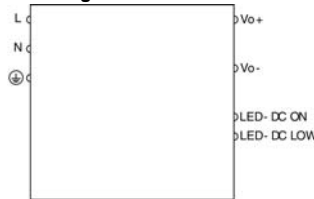
Primary switchmode power supply, Single-phase, Class 2
 Input: Wide range input AC 90 V - 265 V; DC 120 V - 370 V
 Output: 5 V - adjustable



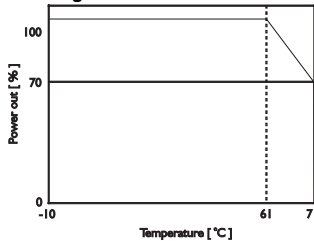
Dimensions



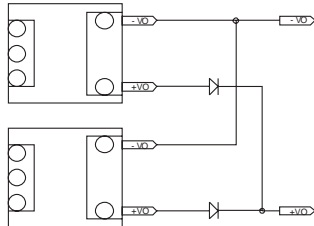
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|-------------------------------------|-------------|---|------------------|---|
| Screw terminal | | | | |
| Output voltage/current | DC 5 V; 3 A | 728762 | DRA 18-05A | 1 |
| Spring terminal | | | | |
| Output voltage/current | DC 5 V; 3 A | 722762 | DRA 18-05 | 1 |
| Input | | DRA 18-05A | DRA 18-05 | |
| Rated voltage | | AC 100–240 V | | |
| Operation voltage range | | AC 90–265 V / DC 120–370 V | | |
| Line frequency | | 47 – 63 Hz | | |
| Rated current | | $V_{in}=115\text{ V}$; AC: 170 mA / $V_{in}=230\text{ V}$; AC: 90 mA | | |
| Inrush current | | $V_{in}=115\text{ V}$; AC: 10 A / $V_{in}=230\text{ V}$; AC: 18 mA | | |
| Input fuse | | T2A / AC 250 V internal | | |
| Power Factor Correction P.F.C. | | – | | |
| Output | | | | |
| Rated voltage output | | DC 5 V | | |
| Rated current output | | 3 A | | |
| Voltage trim range | | 4.5–5.75 V | | |
| Accuracy | | ±1 % | | |
| Line regulation | | ±1 % | | |
| Load regulation | | ±2 % | | |
| Transient recovery time | | 300 µs | | |
| Temperature coefficient | | ±0.02 % / °C | | |
| Ripple & Noise | | 50 mV | | |
| Hold up time | | $V_{in}=115\text{ V}$: 25 ms / $V_{in}=230\text{ V}$: 75 ms | | |
| Status indication DC ON (LED green) | | ≥4.5 V | | |
| Status indication DC LOW (LED red) | | <3.75–4.50 V | | |
| Parallel mode | | with external diodes | | |
| Efficiency | | 77 % | | |
| Rated over load protection | | 110–135 % | | |
| Over voltage protection | | 125–145 % | | |
| Short circuit characteristics | | Hiccup-mode | | |
| General | | | | |
| Switching frequency | | min. 100 kHz | | |
| Insulation voltage input/output | | 3.0 kV _{eff} | | |
| Insulation resistance at DC 500 V | | 100 MΩ | | |
| Operation temperature range | | -10°C – 70°C (Derating) | | |
| Derating | | -3% / °C starting at 60 °C | | |
| Storage temperature range | | -25 °C – 85 °C | | |
| M.T.B.F. | | 210000 h | | |
| Relative humidity | | 20–95 % RH | | |
| Dimensions (w × h × d) | | 22.5 × 90.0 × 115.0 mm | | |
| Cooling | | Air convection | | |
| Housing material | | Plastic | | |
| Field installation | | rail TS 35 (EN 50022) | | |
| Installation position | | vertical | | |
| IP rating | | IP 20 | | |
| Protection class | | 2 | | |
| Weight (kg/piece) | | 0.150 | | |
| Termination | | Screw terminal: 0.2–2.0 mm ² Spring terminal: 0.2–2.0 mm ² | | |
| Approvals | | UL: UL 508 listed; cUL: UL 60950-1, UL 1310 Class 2; TÜV: EN 60950-1; CE: EN 50081-1 / EN 55022 Class B, EN 61000-3-2, EN 601000-3-3, EN 50082-1 / EN 55024 | | |
| Monitoring | | | | |
| DC ON Control (Rdy) | | LED green/red | | |
| Switching voltage | | – | | |
| Switching current | | – | | |
| Switching capacity | | – | | |
| Insulation voltage | | – | | |
| Terminal connexion | | | | |
| Description | | Description | | |
| V+ | | Output terminal + | | |
| V- | | Output terminal - | | |
| ⊥ | | PE- connection | | |
| N | | input terminal | | |
| L | | input terminal | | |

Power supply - regulated, 18 W

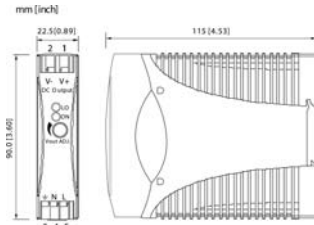
Primary switchmode power supply, Single-phase, Class 2

Input: Wide range input AC 90 V - 265 V; DC 120 V - 370 V

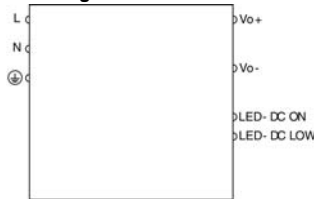
Output: 12 V / 15 V / 24 V - adjustable



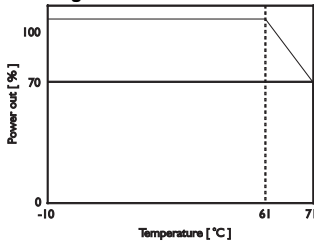
Dimensions



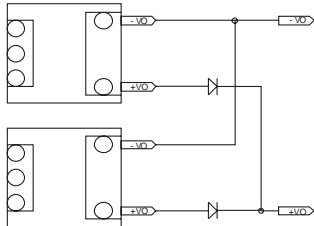
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|-----------------|--------|-----------|---|
| Spring terminal | | | | |
| Output voltage/current | DC 12 V; 1.5 A | 722767 | DRA 18-12 | 1 |
| | DC 15 V; 1.2 A | 722774 | DRA 18-15 | 1 |
| | DC 24 V; 0.75 A | 722752 | DRA 18-24 | 1 |

| Input | DRA 18-12 | DRA 18-15 | DRA 18-24 |
|--------------------------------|---|--------------|-----------|
| Rated voltage | | AC 100–240 V | |
| Operation voltage range | AC 90–265 V / DC 120–370 V | | |
| Line frequency | 47 – 63 Hz | | |
| Rated current | $V_{in} = 115 \text{ V}$; AC: 200 mA / $V_{in} = 230 \text{ V}$; AC: 110 mA | | |
| Inrush current | $V_{in} = 115 \text{ V}$; AC: 10 A / $V_{in} = 230 \text{ V}$; AC: 18 mA | | |
| Input fuse | T2A / AC 250 V internal | | |
| Power Factor Correction P.F.C. | – | | |

| Output | DRA 18-12 | DRA 18-15 | DRA 18-24 |
|-------------------------------------|---|---------------|-------------|
| Rated voltage output | DC 12 V | DC 15 V | DC 24 V |
| Rated current output | 1.5 A | 1.2 A | 0.75 A |
| Voltage trim range | 10.8–13.8 V | 13.5–17.25 V | 21.6–28.8 V |
| Accuracy | ±1 % | | |
| Line regulation | ±1 % | | |
| Load regulation | ±2 % | | |
| Transient recovery time | 300 μs | | |
| Temperature coefficient | ±0.02 % / °C | | |
| Ripple & Noise | 50 mV | | |
| Hold up time | $V_{in} = 115 \text{ V}$: 25 ms / $V_{in} = 230 \text{ V}$: 75 ms | | |
| Status indication DC ON (LED green) | ≥10.8 V | ≥13.5 V | ≥21.6 V |
| Status indication DC LOW (LED red) | <9–10.8 V | <11.25–13.5 V | <18–21.6 V |
| Parallel mode | with external diodes | | |
| Efficiency | 77 % | | |
| Rated over load protection | 110–135 % | | |
| Over voltage protection | 125–145 % | | |
| Short circuit characteristics | Hiccup-mode | | |

| General | |
|-----------------------------------|---|
| Switching frequency | min. 100 kHz |
| Insulation voltage input/output | 3.0 kV _{eff} |
| Insulation resistance at DC 500 V | 100 MΩ |
| Operation temperature range | -10°C – 70°C (Derating) |
| Derating | -3% / °C starting at 60 °C |
| Storage temperature range | -25 °C – 85 °C |
| M.T.B.F. | 210000 h |
| Relative humidity | 20–95 % RH |
| Dimensions (w x h x d) | 22.5 x 90.0 x 115.0 mm |
| Cooling | Air convection |
| Housing material | Plastic |
| Field installation | rail TS 35 (EN 50022) |
| Installation position | vertical |
| IP rating | IP 20 |
| Protection class | 2 |
| Weight (kg/piece) | 0.150 |
| Termination | Spring terminal: 0.2–2.0 mm ² |
| Approvals | UL: UL 508 listed; cUL: UL 60950-1, UL 1310 Class 2; TÜV: EN 60950-1; CE: EN 50081-1 / EN 55022 Class B, EN 61000-3-2, EN 601000-3-3, EN 50082-1 / EN 55024 |

| Monitoring | |
|---------------------|---------------|
| DC ON Control (Rdy) | LED green/red |
| Switching voltage | – |
| Switching current | – |
| Switching capacity | – |
| Insulation voltage | – |

| Terminal connexion | |
|--------------------|-------------------|
| Description | Description |
| V+ | Output terminal + |
| V- | Output terminal - |
| ≡ | PE- connection |
| N | input terminal |
| L | input terminal |

Power supply - regulated, 30 W

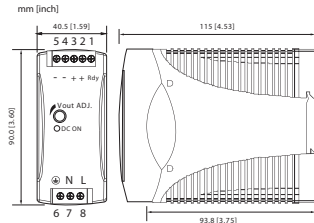
Primary switchmode power supply, Single-phase, Class 2

Input: Wide range input AC 85 V - 264 V; DC 90 V - 375 V

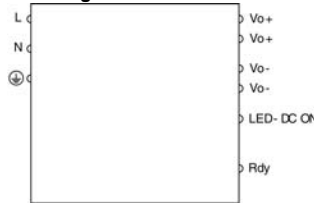
Output: 5 V / 12 V / 24 V / 48 V - adjustable



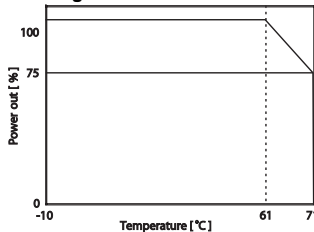
Dimensions



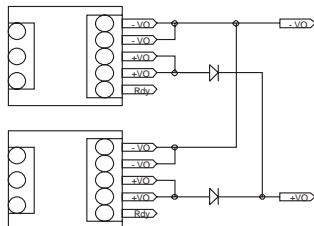
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|------------------|--------|------------|---|
| Screw terminal | | | | |
| Output voltage/current | DC 5 V; 6 A | 722763 | DRA 30-05A | 1 |
| | DC 12 V; 2.5 A | 722768 | DRA 30-12A | 1 |
| | DC 24 V; 1.25 A | 722753 | DRA 30-24A | 1 |
| | DC 48 V; 0.625 A | 722775 | DRA 30-48A | 1 |

| Input | DRA 30-05A | DRA 30-12A | DRA 30-24A | DRA 30-48A |
|--------------------------------|---|------------|------------|------------|
| Rated voltage | AC 100–240 V | | | |
| Operation voltage range | AC 85–264 V / DC 90–375 V | | | |
| Line frequency | 47 – 63 Hz | | | |
| Rated current | $V_{in}=115\text{ V}$; AC: 360 mA / $V_{in}=230\text{ V}$; AC: 190 mA | | | |
| Inrush current | $V_{in}=115\text{ V}$; AC: 20 A / $V_{in}=230\text{ V}$; AC: 40 mA | | | |
| Input fuse | T2A / AC 250 V internal | | | |
| Power Factor Correction P.F.C. | – | | | |

| Output | DRA 30-05A | DRA 30-12A | DRA 30-24A | DRA 30-48A |
|-------------------------|--------------|------------|------------|------------|
| Rated voltage output | DC 5 V | DC 12 V | DC 24 V | DC 48 V |
| Rated current output | 6 A | 2.5 A | 1.25 A | 0.625 |
| Voltage trim range | 5–5.5 V | 12–14 V | 24–28 V | 48–55 V |
| Accuracy | ±1 % | | | |
| Line regulation | ±0.5 % | | | |
| Load regulation | ±0.5 % | | | |
| Transient recovery time | 1.0 ms | | | |
| Temperature coefficient | ±0.02 % / °C | | | |
| Ripple & Noise | 50 mV | | | |

| | | | | |
|-------------------------------------|---|-------------|---------|-------|
| Hold up time | $V_{in}=115\text{ V}$: 20 ms / $V_{in}=230\text{ V}$: 30 ms | | | |
| Status indication DC ON (LED green) | ≥4 V | ≥9.6 V | ≥19.2 V | ≥37 V |
| Status indication DC LOW (LED red) | – | | | |
| Parallel mode | with external diodes | | | |
| Efficiency | 79 % | 84 % | 86 % | 86 % |
| Rated over load protection | 120 – 136 % | 110 – 140 % | | |
| Over voltage protection | 125–137 % | | | |
| Short circuit characteristics | Hiccup-mode | | | |

| General | | | | |
|-----------------------------------|---|--|---|--|
| Switching frequency | min. 100 kHz | | | |
| Insulation voltage input/output | 3.0 kV _{eff} | | | |
| Insulation resistance at DC 500 V | 100 MΩ | | | |
| Operation temperature range | -10°C – 70°C (Derating) | | | |
| Derating | -2.5% / °C starting at 60 °C | | | |
| Storage temperature range | -25 °C – 85 °C | | | |
| M.T.B.F. | 210000 h | | | |
| Relative humidity | 20–90% RH | | | |
| Dimensions (w × h × d) | 40.5 × 90.0 × 115.0 mm | | | |
| Cooling | Air convection | | | |
| Housing material | Plastic | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Installation position | vertical | | | |
| IP rating | IP 20 | | | |
| Protection class | – | | 2 | |
| Weight (kg/piece) | 0.290 | | | |
| Termination | Screw terminal: 0.2–2.0 mm ² | | | |
| Approvals | UL: UL 508 listed; cUL: UL 60950-1, UL 1310 Class 2; TÜV: EN 60950-1; CE: EN 61000-6-3 / EN 55022 Class B, EN 61000-3-2, EN 601000-3-3, EN 55024, EN 61000-6-2, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11 | | | |

| Monitoring | | | | |
|---------------------|---|----------------|--|---|
| DC ON Control (Rdy) | – | Open Collector | | – |
| Switching voltage | – | DC 24 V | | – |
| Switching current | – | ≤ 35 mA | | – |
| Switching capacity | – | | | |
| Insulation voltage | – | none | | – |

Terminal connexion

| Description | Description |
|-------------|-------------------|
| V+ | Output terminal + |
| V- | Output terminal - |
| PE | PE- connection |
| N | input terminal |
| L | input terminal |

Power supply - regulated, 30 W

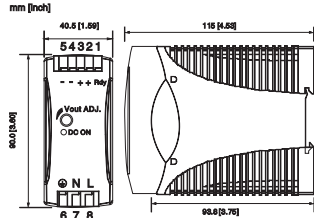
Primary switchmode power supply, Single-phase, Class 2

Input: Wide range input AC 85 V - 264 V; DC 90 V - 375 V

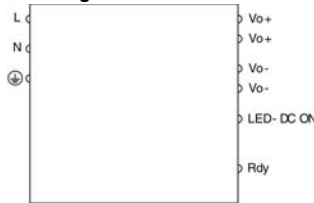
Output: 5 V / 12 V / 24 V / 48 V - adjustable



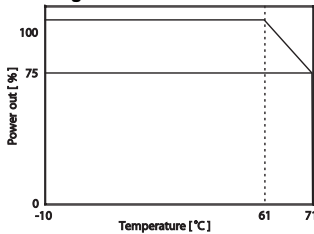
Dimensions



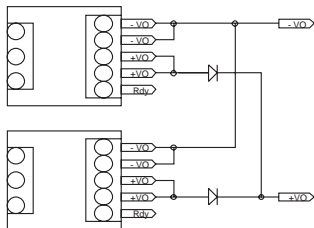
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|------------------|--------|-----------|---|
| Spring terminal | | | | |
| Output voltage/current | DC 5 V; 6 A | 728763 | DRA 30-05 | 1 |
| | DC 12 V; 2.5 A | 728768 | DRA 30-12 | 1 |
| | DC 24 V; 1.25 A | 728753 | DRA 30-24 | 1 |
| | DC 48 V; 0.625 A | 728775 | DRA 30-48 | 1 |

| Input | DRA 30-05 | DRA 30-12 | DRA 30-24 | DRA 30-48 |
|--------------------------------|---|-----------|-----------|-----------|
| Rated voltage | AC 100–240 V | | | |
| Operation voltage range | AC 85–264 V / DC 90–375 V | | | |
| Line frequency | 47 – 63 Hz | | | |
| Rated current | $V_{in}=115\text{ V}$; AC: 360 mA / $V_{in}=230\text{ V}$; AC: 190 mA | | | |
| Inrush current | $V_{in}=115\text{ V}$; AC: 20 A / $V_{in}=230\text{ V}$; AC: 40 mA | | | |
| Input fuse | T2A / AC 250 V internal | | | |
| Power Factor Correction P.F.C. | - | | | |

| Output | DRA 30-05 | DRA 30-12 | DRA 30-24 | DRA 30-48 |
|-------------------------|--------------|-----------|-----------|-----------|
| Rated voltage output | DC 5 V | DC 12 V | DC 24 V | DC 48 V |
| Rated current output | 6 A | 2.5 A | 1.25 A | 0.625 |
| Voltage trim range | 5–5.5 V | 12–14 V | 24–28 V | 48–55 V |
| Accuracy | ±1 % | | | |
| Line regulation | ±0.5 % | | | |
| Load regulation | ±0.5 % | | | |
| Transient recovery time | 1.0 ms | | | |
| Temperature coefficient | ±0.02 % / °C | | | |
| Ripple & Noise | 50 mV | | | |

| | | | | |
|-------------------------------------|---|-----------|---------|-------|
| Hold up time | $V_{in}=115\text{ V}$: 20 ms / $V_{in}=230\text{ V}$: 30 ms | | | |
| Status indication DC ON (LED green) | ≥4 V | ≥9.6 V | ≥19.2 V | ≥37 V |
| Status indication DC LOW (LED red) | - | | | |
| Parallel mode | with external diodes | | | |
| Efficiency | 79 % | 84 % | 86 % | |
| Rated over load protection | 110–140 % | | | |
| Over voltage protection | 120–136 % | 125–137 % | | |
| Short circuit characteristics | Hiccup-mode | | | |

| General | | | | |
|-----------------------------------|--|---|--|--|
| Switching frequency | min. 100 kHz | | | |
| Insulation voltage input/output | 3.0 kV _{eff} | | | |
| Insulation resistance at DC 500 V | 100 MΩ | | | |
| Operation temperature range | -10°C – 70°C (Derating) | | | |
| Derating | -2.5% / °C starting at 60 °C | | | |
| Storage temperature range | -25 °C – 85 °C | | | |
| M.T.B.F. | 210000 h | | | |
| Relative humidity | 20–90% RH | | | |
| Dimensions (w x h x d) | 40.5 x 90.0 x 115.0 mm | | | |
| Cooling | Air convection | | | |
| Housing material | Plastic | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Installation position | vertical | | | |
| IP rating | IP 20 | | | |
| Protection class | - | 2 | | |
| Weight (kg/piece) | 0.290 | | | |
| Termination | Spring terminal: 0.2–2.0 mm ² | | | |
| Approvals | UL: UL 508 listed cUL: UL 60950-1 TÜV: EN 60950-1 CE: EN 61000-6-3 / EN 55022 Class B; EN 61000-3-2 EN 601000-3-3; EN 55024; EN 61000-6-2; EN 61000-4-2; EN 61000-4-3 EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-8; EN 61000-4-11 | | | |

| Monitoring | | | | |
|---------------------|---|----------------|---|--|
| DC ON Control (Rdy) | - | Open Collector | - | |
| Switching voltage | - | DC 24 V | - | |
| Switching current | - | ≤ 35 mA | - | |
| Switching capacity | - | - | - | |
| Insulation voltage | - | none | - | |

Terminal connexion

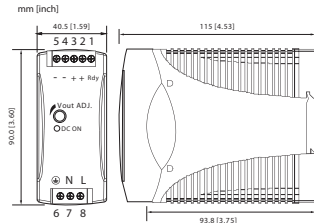
| Description | Description |
|-------------|-------------------|
| V+ | Output terminal + |
| V- | Output terminal - |
| ⊥ | PE- connection |
| N | input terminal |
| L | input terminal |

Power supply - regulated, 50 W

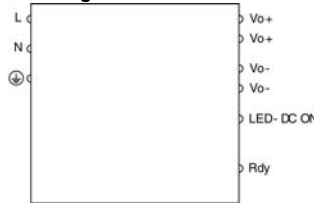
Primary switchmode power supply, Single-phase
Input: Wide range input AC 85 V - 264 V; DC 90 V - 375 V
Output: 5 V - adjustable



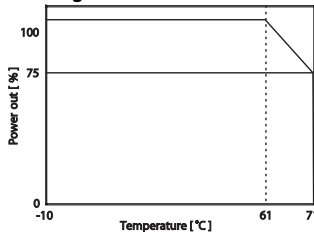
Dimensions



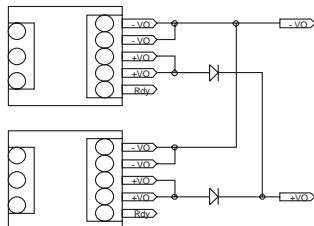
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|--------------|--------|------------|---|
| Screw terminal | | | | |
| Output voltage/current | DC 5 V; 10 A | 722764 | DRA 60-05A | 1 |
| Spring terminal | | | | |
| Output voltage/current | DC 5 V; 10 A | 728764 | DRA 60-05 | 1 |

| Input | DRA 60-05A | DRA 60-05 |
|--------------------------------|---|-----------|
| Rated voltage | - | |
| Operation voltage range | AC 85–264 V / DC 90–375 V | |
| Line frequency | 47 – 63 Hz | |
| Rated current | $V_{in} = 115 \text{ V}$; AC: 550 mA / $V_{in} = 230 \text{ V}$; AC: 280 mA | |
| Inrush current | $V_{in} = 115 \text{ V}$; AC: 30 A / $V_{in} = 230 \text{ V}$; AC: 60 mA | |
| Input fuse | T2A / AC 250 V internal | |
| Power Factor Correction P.F.C. | - | |

| Output | |
|-------------------------------------|---|
| Rated voltage output | DC 5 V |
| Rated current output | 10 A |
| Voltage trim range | 5–5.5 V |
| Accuracy | ±1 % |
| Line regulation | ±0.5 % |
| Load regulation | ±0.5 % |
| Transient recovery time | 1.0 ms |
| Temperature coefficient | ±0.02 % / °C |
| Ripple & Noise | 50 mV |
| Hold up time | $V_{in} = 115 \text{ V}$: 20 ms / $V_{in} = 230 \text{ V}$: 30 ms |
| Status indication DC ON (LED green) | ≥4 V |
| Status indication DC LOW (LED red) | - |
| Parallel mode | with external diodes |
| Efficiency | 79 % |
| Rated over load protection | 110–150 % |
| Over voltage protection | 120–136 % |
| Short circuit characteristics | Hiccup-mode |

| General | |
|-----------------------------------|---|
| Switching frequency | min. 100 kHz |
| Insulation voltage input/output | 3.0 kV _{eff} |
| Insulation resistance at DC 500 V | 100 MΩ |
| Operation temperature range | -10°C – 70°C (Derating) |
| Derating | -2.5% / °C starting at 60 °C |
| Storage temperature range | -25 °C – 85 °C |
| M.T.B.F. | 210000 h |
| Relative humidity | 20–90% RH |
| Dimensions (w × h × d) | 40.5 × 90.0 × 115.0 mm |
| Cooling | Air convection |
| Housing material | Plastic |
| Field installation | rail TS 35 (EN 50022) |
| Installation position | vertical |
| IP rating | IP 20 |
| Protection class | - |
| Weight (kg/piece) | 0.360 |
| Termination | Screw terminal 0.2–2.0 mm ² Spring terminal 0.2–2.0 mm ² |
| Approvals | UL: UL 508 listed cUL: UL 60950-1 TÜV: EN 60950-1 CE: EN 61000-6-3 / EN 55022 Class B; EN 61000-3-2 EN 61000-3-4; EN 55024; EN 61000-6-2; EN 61000-4-2; EN 61000-4-3 EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-8; EN 61000-4-11 |

| Monitoring | |
|---------------------|---|
| DC ON Control (Rdy) | - |
| Switching voltage | - |
| Switching current | - |
| Switching capacity | - |
| Insulation voltage | - |

| Terminal connexion | |
|--------------------|-------------------|
| Description | Description |
| V+ | Output terminal + |
| V- | Output terminal - |
| PE | PE- connection |
| N | input terminal |
| L | input terminal |

Power supply - regulated, 60 W

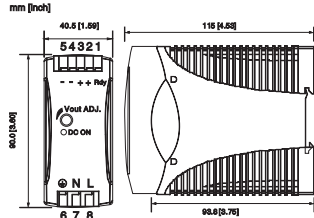
Primary switchmode power supply, Single-phase, Class 2

Input: Wide range input AC 85 V - 264 V; DC 90 V - 375 V

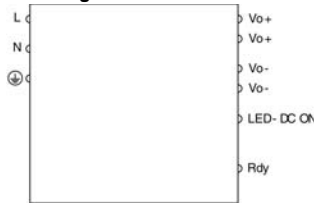
Output: 12 V / 24 V / 48 V - adjustable



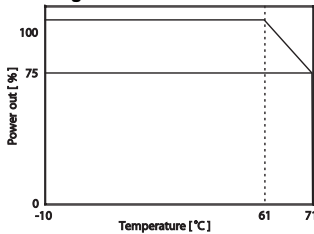
Dimensions



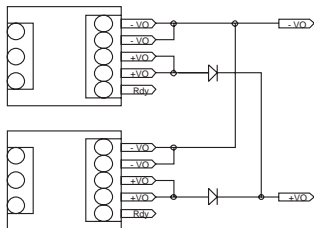
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|-----------------|--------|-----------|---|
| Spring terminal | | | | |
| Output voltage/current | DC 12 V; 5 A | 728769 | DRA 60-12 | 1 |
| | DC 24 V; 2.5 A | 728754 | DRA 60-24 | 1 |
| | DC 48 V; 1.25 A | 728776 | DRA 60-48 | 1 |

| Input | DRA 60-12 | DRA 60-24 | DRA 60-48 |
|--------------------------------|---|--------------|-----------|
| Rated voltage | | AC 100–240 V | |
| Operation voltage range | AC 85–264 V / DC 90–375 V | | |
| Line frequency | 47 – 63 Hz | | |
| Rated current | V _{in} = 115 V; AC: 690 mA / V _{in} = 230 V; AC: 360 mA | | |
| Inrush current | V _{in} = 115 V; AC: 30 A / V _{in} = 230 V; AC: 60 mA | | |
| Input fuse | T2A / AC 250 V internal | | |
| Power Factor Correction P.F.C. | - | | |

| Output | DRA 60-12 | DRA 60-24 | DRA 60-48 |
|-------------------------------------|---|-----------|-----------|
| Rated voltage output | DC 12 V | DC 24 V | DC 48 V |
| Rated current output | 5 A | 2.5 A | 1.25 A |
| Voltage trim range | 12–14 V | 24–28 V | 48–55 V |
| Accuracy | ±1 % | | |
| Line regulation | ±0.5 % | | |
| Load regulation | ±0.5 % | | |
| Transient recovery time | 1.0 ms | | |
| Temperature coefficient | ±0.02 % / °C | | |
| Ripple & Noise | 50 mV | | |
| Hold up time | V _{in} = 115 V: 20 ms / V _{in} = 230 V: 30 ms | | |
| Status indication DC ON (LED green) | ≥9.6 V | ≥19.2 V | ≥37 V |
| Status indication DC LOW (LED red) | - | | |
| Parallel mode | with external diodes | | |
| Efficiency | 86 % | 89 % | 89 % |
| Rated over load protection | 110–150 % | | |
| Over voltage protection | 125–138 % | | |
| Short circuit characteristics | Hiccup-mode | | |

| General | | | |
|-----------------------------------|--|---|--|
| Switching frequency | min. 100 kHz | | |
| Insulation voltage input/output | 3.0 kV _{eff} | | |
| Insulation resistance at DC 500 V | 100 MΩ | | |
| Operation temperature range | -10°C – 70°C (Derating) | | |
| Derating | -2.5% / °C starting at 60 °C | | |
| Storage temperature range | -25 °C – 85 °C | | |
| M.T.B.F. | 210000 h | | |
| Relative humidity | 20–90% RH | | |
| Dimensions (w x h x d) | 40.5 x 90.0 x 115.0 mm | | |
| Cooling | Air convection | | |
| Housing material | Plastic | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Installation position | vertical | | |
| IP rating | IP 20 | | |
| Protection class | - | 2 | |
| Weight (kg/piece) | 0.360 | | |
| Termination | Spring terminal 0.2–2.0 mm ² | | |
| Approvals | UL: UL 508 listed cUL: UL 60950-1, UL 1310 Class 2 TÜV: EN 60950-1 CE: EN 61000-6-3 / EN 55022 Class B; EN 61000-3-2 EN 61000-3-3; EN 55024; EN 61000-6-2; EN 61000-4-2; EN 61000-4-3 EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-8; EN 61000-4-11 | | |

| Monitoring | | | |
|---------------------|---|----------------|---|
| DC ON Control (Rdy) | - | Open Collector | - |
| Switching voltage | - | DC 24 V | - |
| Switching current | - | ≤ 35 mA | - |
| Switching capacity | - | - | - |
| Insulation voltage | - | none | - |

| Terminal connexion | |
|--------------------|-------------------|
| Description | Description |
| V+ | Output terminal + |
| V- | Output terminal - |
| ⊥ | PE- connection |
| N | input terminal |
| L | input terminal |

Power supply - regulated, 60 W

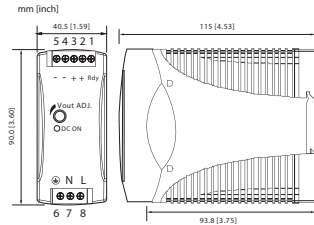
Primary switchmode power supply, Single-phase, Class 2

Input: Wide range input AC 85 V - 264 V; DC 90 V - 375 V

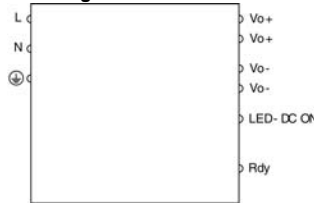
Output: 12 V / 24 V / 48 V - adjustable



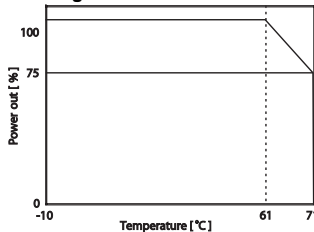
Dimensions



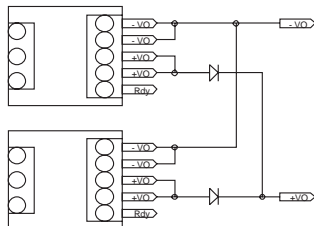
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|-----------------|--------|------------|---|
| Screw terminal | | | | |
| Output voltage/current | DC 12 V; 5 A | 722769 | DRA 60-12A | 1 |
| | DC 24 V; 2.5 A | 722754 | DRA 60-24A | 1 |
| | DC 48 V; 1.25 A | 722776 | DRA 60-48A | 1 |

| Input | DRA 60-12A | DRA 60-24A | DRA 60-48A |
|--------------------------------|---|--------------|------------|
| Rated voltage | | AC 100–240 V | |
| Operation voltage range | AC 85–264 V / DC 90–375 V | | |
| Line frequency | 47 – 63 Hz | | |
| Rated current | V _{in} = 115 V; AC: 690 mA / V _{in} = 230 V; AC: 360 mA | | |
| Inrush current | V _{in} = 115 V; AC: 30 A / V _{in} = 230 V; AC: 60 mA | | |
| Input fuse | T2A / AC 250 V internal | | |
| Power Factor Correction P.F.C. | – | | |

| Output | DRA 60-12A | DRA 60-24A | DRA 60-48A |
|-------------------------|---|------------|------------|
| Rated voltage output | DC 12 V | DC 24 V | DC 48 V |
| Rated current output | 5 A | 2.5 A | 1.25 A |
| Voltage trim range | 12–14 V | 24–28 V | 48–55 V |
| Accuracy | ±1 % | | |
| Line regulation | ±0.5 % | | |
| Load regulation | ±0.5 % | | |
| Transient recovery time | 1.0 ms | | |
| Temperature coefficient | ±0.02 % / °C | | |
| Ripple & Noise | 50 mV | | |
| Hold up time | V _{in} = 115 V: 20 ms / V _{in} = 230 V: 30 ms | | |

| | | | |
|-------------------------------------|----------------------|---------|-------|
| Status indication DC ON (LED green) | ≥9.6 V | ≥19.2 V | ≥37 V |
| Status indication DC LOW (LED red) | – | | |
| Parallel mode | with external diodes | | |
| Efficiency | 86 % | 89 % | |
| Rated over load protection | 110–150 % | | |
| Over voltage protection | 125–138 % | | |
| Short circuit characteristics | Hiccup-mode | | |

| General | | | |
|-----------------------------------|---|---|--|
| Switching frequency | min. 100 kHz | | |
| Insulation voltage input/output | 3.0 kV _{eff} | | |
| Insulation resistance at DC 500 V | 100 MΩ | | |
| Operation temperature range | -10°C – 70°C (Derating) | | |
| Derating | -2.5% / °C starting at 60 °C | | |
| Storage temperature range | -25 °C – 85 °C | | |
| M.T.B.F. | 210000 h | | |
| Relative humidity | 20–90% RH | | |
| Dimensions (w × h × d) | 40.5 × 90.0 × 115.0 mm | | |
| Cooling | Air convection | | |
| Housing material | Plastic | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Installation position | vertical | | |
| IP rating | IP 20 | | |
| Protection class | – | 2 | |
| Weight (kg/piece) | 0.360 | | |
| Termination | Screw terminal: 0.2–2.0 mm ² | | |
| Approvals | UL: UL 508 listed cUL: UL 60950-1, UL 1310 Class 2 TÜV: EN 60950-1 CE: EN 61000-6-3 / EN 55022 Class B; EN 61000-3-2 EN 601000-3-3; EN 55024; EN 61000-6-2; EN 61000-4-2; EN 61000-4-3 EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-8; EN 61000-4-11 | | |

| Monitoring | | | |
|---------------------|---|----------------|---|
| DC ON Control (Rdy) | – | Open Collector | – |
| Switching voltage | – | DC 24 V | – |
| Switching current | – | ≤ 35 mA | – |
| Switching capacity | – | | |
| Insulation voltage | – | none | – |

| Terminal connexion | | | |
|--------------------|-------------------|--|--|
| Description | Description | | |
| V+ | Output terminal + | | |
| V- | Output terminal - | | |
| PE | PE- connection | | |
| N | input terminal | | |
| L | input terminal | | |

Power supply - regulated, 120 W

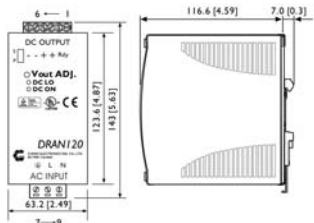
Primary switchmode power supply, PFC, Single-phase, screw terminal - pluggable

Input: Wide range input AC 90–132 V; AC 186–264 V, DC 210–370 V (automatic)

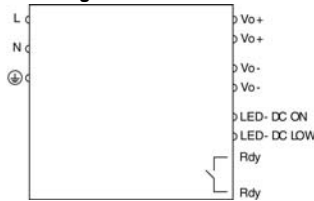
Output: 12 V / 24 V / 48 V - adjustable



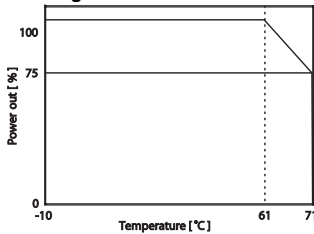
Dimensions



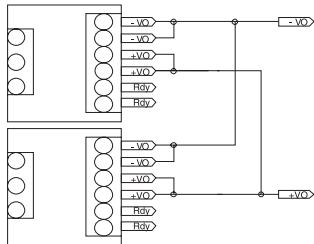
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|----------------|--------|--------------|---|
| Screw terminal | | | | |
| Output voltage/current | DC 12 V; 10 A | 722770 | DRAN 120-12B | 1 |
| | DC 24 V; 5 A | 722758 | DRAN 120-24B | 1 |
| | DC 48 V; 2.5 A | 722777 | DRAN 120-48B | 1 |

| Input | DRAN 120-12B | DRAN 120-24B | DRAN 120-48B |
|--------------------------------|---|--------------|--------------|
| Rated voltage | AC 115 / 230 V (auto select) | | |
| Operation voltage range | AC 90–132 V; AC 186–264 V / DC 210–370 V | | |
| Line frequency | 47 – 63 Hz | | |
| Rated current | $V_{in}=115$ V; AC: 1.25 A / $V_{in}=230$ V; AC: 0.63 A | | |
| Inrush current | $V_{in}=115$ V; AC: 24 A / $V_{in}=230$ V; AC: 48 mA | | |
| Input fuse | T4A / AC 250 V internal | | |
| Power Factor Correction P.F.C. | 0,7 | | |

| Output | DRAN 120-12B | DRAN 120-24B | DRAN 120-48B |
|-------------------------------------|---|--------------|--------------|
| Rated voltage output | DC 12 V | DC 24 V | DC 48 V |
| Rated current output | 10 A | 5 A | 2.5 A |
| Voltage trim range | 11.4–14.5 V | 22.5–28.5 V | 45–55 V |
| Accuracy | ±1 % | | |
| Line regulation | ±0.5 % | | |
| Load regulation | Single ±1 %, Parallel ±5 % | | |
| Transient recovery time | 1.0 ms | | |
| Temperature coefficient | ±0.3 % / °C | | |
| Ripple & Noise | 50 mV | | |
| Hold up time | $V_{in}=115$ V: 25 ms / $V_{in}=230$ V: 30 ms | | |
| Status indication DC ON (LED green) | ≥10–11.2 V | ≥17.6–19.4 V | ≥37–43 V |
| Status indication DC LOW (LED red) | <10–11.2 V | <17.6–19.4 V | <37–43 V |
| Parallel mode | max. 3 units at 90% load current, manual switch | | |
| Efficiency | 84 % | 86 % | 87 % |
| Rated over load protection | 105–125 % | | |
| Over voltage protection | 125–145 % | | |
| Short circuit characteristics | Current limit | | |

| General | | | |
|-----------------------------------|---|--|--|
| Switching frequency | min. 80 kHz | | |
| Insulation voltage input/output | 3.0 kV _{eff} | | |
| Insulation resistance at DC 500 V | 100 MΩ | | |
| Operation temperature range | -10°C – 70°C (Derating) | | |
| Derating | -2.5% / °C starting at 60 °C | | |
| Storage temperature range | -25 °C – 85 °C | | |
| M.T.B.F. | 210000 h | | |
| Relative humidity | 20–90% RH | | |
| Dimensions (w x h x d) | 63.5 x 142.0 x 116.0 mm | | |
| Cooling | Air convection | | |
| Housing material | metal | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Installation position | vertical | | |
| IP rating | IP 20 | | |
| Protection class | - | | |
| Weight (kg/piece) | 0.920 | | |
| Termination | Screw terminal: 0.2–2.0 mm ² | | |
| Approvals | UL: UL 508 listed cUL: UL 60950-1 TÜV: EN 60950 CE: EN 61000-6-3, EN 55022 Class B EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 55024 | | |

| Monitoring | | | |
|---------------------|---|---------------|---|
| DC ON Control (Rdy) | - | Normally open | - |
| Switching voltage | - | DC 60 V | - |
| Switching current | - | max. 300 mA | - |
| Switching capacity | - | - | - |
| Insulation voltage | - | DC 500 V | - |

| Terminal connexion | | | |
|---------------------------|-------------------|--|--|
| Description | Description | | |
| V+ | Output terminal + | | |
| V- | Output terminal - | | |
| ≡ | PE- connection | | |
| N | input terminal | | |
| L | input terminal | | |

Power supply - regulated, 240 W

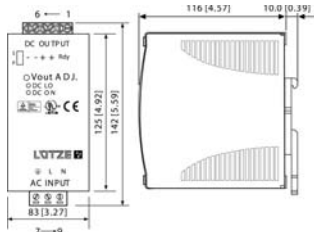
Primary switchmode power supply, PFC, Single-phase

Input: Wide range input AC 93 - 132 V; AC 186 - 264 V, DC 210 - 370 V - automatic

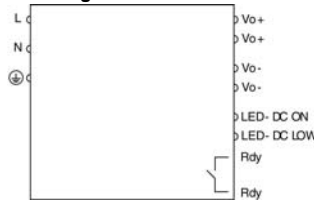
Output: 24 V / 48 V - adjustable



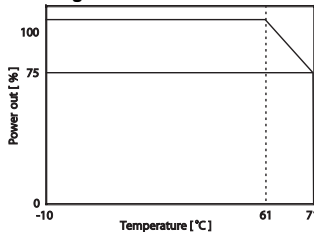
Dimensions



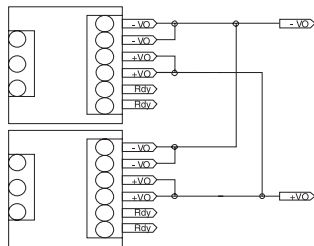
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|----------------------------------|---------------|--------|-------------|---|
| Screw terminal, pluggable | | | | |
| Output voltage/current | DC 24 V; 10 A | 722759 | DRA 240-24B | 1 |
| | DC 48 V; 5 A | 722778 | DRA 240-48B | 1 |
| Screw terminal | | | | |
| Output voltage/current | DC 24 V; 10 A | 722781 | DRA 240-24A | 1 |

| Input | DRA 240-24B | DRA 240-48B | DRA 240-24A |
|--------------------------------|---|-------------|-------------|
| Rated voltage | AC 115 / 230 V (auto select) | | |
| Operation voltage range | AC 93–132 V; AC 186–264 V / DC 210–370 V | | |
| Line frequency | 47 – 63 Hz | | |
| Rated current | $V_{in}=115\text{ V}$; AC: 2.4 A / $V_{in}=230\text{ V}$; AC: 1.2 A | | |
| Inrush current | $V_{in}=115\text{ V}$; AC: 30 A / $V_{in}=230\text{ V}$; AC: 60 mA | | |
| Input fuse | T6.3A / AC 250 V internal | | |
| Power Factor Correction P.F.C. | 0,7 | | |

| Output | DRA 240-24B | DRA 240-48B | DRA 240-24A |
|-------------------------------------|---|-------------|---------------|
| Rated voltage output | DC 24 V | DC 48 V | DC 24 V |
| Rated current output | 10 A | 5 A | 10 A |
| Voltage trim range | 22.5–28.5 | 47–56 V | 22.5–28.5 V |
| Accuracy | ±1 % | | |
| Line regulation | ±0.5 % | | |
| Load regulation | Single ±1 %, Parallel ±5 % | | |
| Transient recovery time | 1.0 ms | | |
| Temperature coefficient | ±0.3 % / °C | | |
| Ripple & Noise | 100 mV | | |
| Hold up time | $V_{in}=115\text{ V}$: 25 ms / $V_{in}=230\text{ V}$: 30 ms | | |
| Status indication DC ON (LED green) | < 17.6/19.4 V | <37/43 V | < 17.6/19.4 V |
| Status indication DC LOW (LED red) | < 17.6/19.4 V | <37/43 V | < 17.6/19.4 V |
| Parallel mode | max. 3 units at 90% load current, manual switch | | |
| Efficiency | 89 % | 90 % | 89 % |
| Rated over load protection | 105–145 % | | |
| Over voltage protection | 120–145 % | | |
| Short circuit characteristics | Current limit | | |

| General | | | |
|-----------------------------------|---|---|--|
| Switching frequency | min. 80 kHz | | |
| Insulation voltage input/output | 3.0 kV _{eff} | | |
| Insulation resistance at DC 500 V | 100 MΩ | | |
| Operation temperature range | -10°C – 70°C (Derating) | | |
| Derating | -2.5% / °C starting at 60 °C | | |
| Storage temperature range | -25 °C – 85 °C | | |
| M.T.B.F. | 210000 h | | |
| Relative humidity | 20–95% RH | | |
| Dimensions (w x h x d) | 83.0 x 142.0 x 116.0 mm | | |
| Cooling | Air convection | | |
| Housing material | metal | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Installation position | vertical | | |
| IP rating | IP 20 | | |
| Protection class | – | | |
| Weight (kg/piece) | 1.000 | | |
| Termination | Screw terminal: 0.5–4.0 mm ² , pluggable | Screw terminal: 0.2–2.0 mm ² | |

| | | | |
|--|--|--|--|
| Approvals | | | |
| UL: UL 508 listed | | | |
| cUL: UL 60950-1 | | | |
| TÜV: EN 60950 | | | |
| CE: EN 61000-6-3, EN 55022 Class B | | | |
| EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 55024 | | | |

| Monitoring | | | |
|---------------------|---------------|---|---------------|
| DC ON Control (Rdy) | Normally open | – | Normally open |
| Switching voltage | DC 60 V | – | DC 60 V |
| Switching current | max. 300 mA | – | max. 300 mA |
| Switching capacity | – | – | – |
| Insulation voltage | DC 500 V | – | DC 500 V |

Terminal connexion

| Description | Description |
|-------------|-------------------|
| V+ | Output terminal + |
| V- | Output terminal - |
| PE | PE- connection |
| N | input terminal |
| L | input terminal |

Power supply - regulated, 480 W

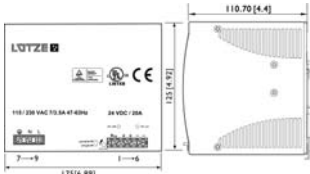
Primary switchmode power supply, PFC, Single-phase

Input: Wide range input AC 90 - 264 V; DC 120 - 370 V

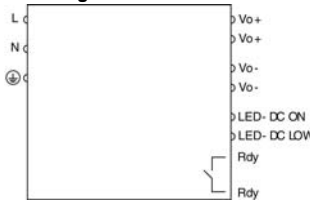
Output: 24 V / 48 V - adjustable



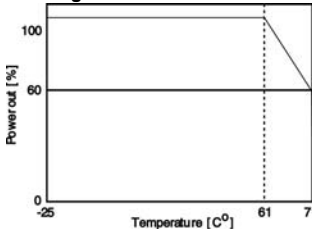
Dimensions



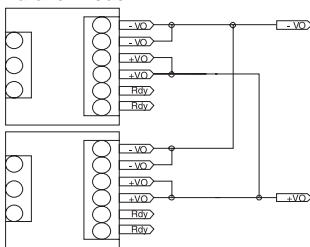
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|----------------------------------|---------------|--------|-------------|---|
| Screw terminal, pluggable | | | | |
| Output voltage/current | DC 24 V; 20 A | 728782 | DRA 480-24B | 1 |
| Screw terminal | | | | |
| Output voltage/current | DC 24 V; 20 A | 722782 | DRA 480-24A | 1 |
| | DC 48 V; 10 A | 722779 | DRA 480-48A | 1 |

| Input | DRA 480-24B | DRA 480-24A | DRA 480-48A |
|--------------------------------|-------------|--|-------------|
| Rated voltage | | AC 115 / 230 V (auto select) | |
| Operation voltage range | | AC 90-264 V; DC 120-370 V | |
| Line frequency | | 47 - 63 Hz | |
| Rated current | | $V_{in}=115\text{ V}$; AC: 4.8 A / $V_{in}=230\text{ V}$; AC: 2.45 A | |
| Inrush current | | $V_{in}=115\text{ V}$; AC: 25 A / $V_{in}=230\text{ V}$; AC: 50 mA | |
| Input fuse | | T10A / AC 250 V internal | |
| Power Factor Correction P.F.C. | | 0,99 | |

| Output | DRA 480-24B | DRA 480-24A | DRA 480-48A |
|-------------------------------------|---------------|---|-------------|
| Rated voltage output | DC 24 V | | DC 48 V |
| Rated current output | 20 A | | 10 A |
| Voltage trim range | 22.5-28.5 V | | 47-56 V |
| Accuracy | | ±1 % | |
| Line regulation | | ±0.5 % | |
| Load regulation | | Single ±0.5 %, Parallel ±5 % | |
| Transient recovery time | | 1.0 ms | |
| Temperature coefficient | | ±0.02 % / °C | |
| Ripple & Noise | | 100 mV | |
| Hold up time | | min. 30 ms | |
| Status indication DC ON (LED green) | < 17.6/19.4 V | | <37/40 V |
| Status indication DC LOW (LED red) | < 17.6/19.4 V | | <37/43 V |
| Parallel mode | | max. 3 units at 90% load current, manual switch | |
| Efficiency | | 89 % | 90 % |
| Rated over load protection | | 120-140 % | |
| Over voltage protection | | 125-137 % | 119-131 % |
| Short circuit characteristics | | Current limit | |

| General | |
|-----------------------------------|--|
| Switching frequency | min. 100 kHz |
| Insulation voltage input/output | 3.0 kV _{eff} |
| Insulation resistance at DC 500 V | 100 MΩ |
| Operation temperature range | -25°C - 71°C (Derating) |
| Derating | -4% / °C starting at 61 °C |
| Storage temperature range | -25 °C - 85 °C |
| M.T.B.F. | 210000 h |
| Relative humidity | 20-95% RH |
| Dimensions (w x h x d) | 175.0 x 125.0 x 116.0 mm |
| Cooling | Air convection |
| Housing material | metal |
| Field installation | rail TS 35 (EN 50022) |
| Installation position | vertical |
| IP rating | IP 20 |
| Protection class | - |
| Weight (kg/piece) | 1.920 |
| Termination | Screw terminal: 0.2-5.0 mm ² - pluggable Screw terminal: 0.2-6.0 mm ² |

| Approvals | |
|-----------|---|
| | UL: UL 508 listed cUL: UL 60950-1 accepted TÜV: EN 60950-1; CE: EN 61000-6-3 / EN 55022 Class B EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 55024 |

| Monitoring | | |
|---------------------|---------------|---|
| DC ON Control (Rdy) | Normally open | - |
| Switching voltage | DC 60 V | - |
| Switching current | max. 300 mA | - |
| Switching capacity | | - |
| Insulation voltage | DC 500 V | - |

Terminal connexion

| Description | Description |
|-------------|-------------------|
| V+ | Output terminal + |
| V- | Output terminal - |
| PE | PE- connection |
| N | input terminal |
| L | input terminal |

Power supply - regulated, 480 W, 3-phase

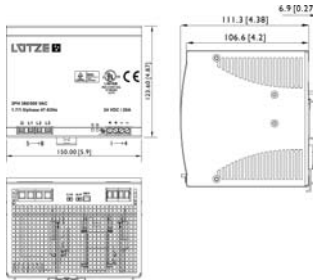
Primary switchmode power supply, PFC, 3-phase, screw terminal

Input: Wide range input AC 340 - 576 V; DC 480 - 820 V

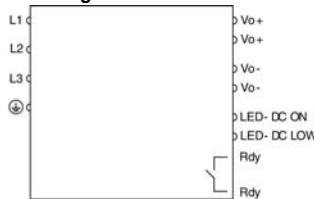
Output: 24 V / 48 V - adjustable



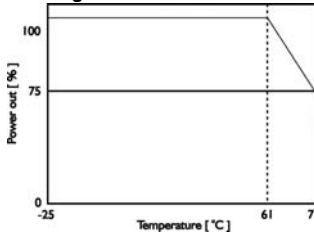
Dimensions



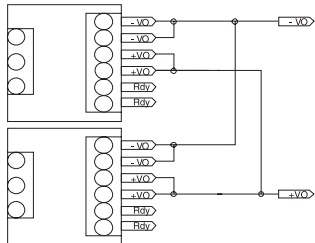
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|---------------|--------|------------|---|
| Screw terminal | | | | |
| Output voltage/current | DC 24 V; 20 A | 722805 | WRA 480-24 | 1 |
| | DC 48 V; 10 A | 722809 | WRA 480-48 | 1 |

| Input | WRA 480-24 | WRA 480-48 |
|--------------------------------|---|------------|
| Rated voltage | AC 380–500 V | |
| Operation voltage range | AC 340–576 V; DC 480–820 V | |
| Line frequency | 47 – 63 Hz | |
| Rated current | $V_{in} = 400$ V; AC: 1.5 A / $V_{in} = 480$ V; AC: 1.2 A | |
| Inrush current | 18 A | |
| Input fuse | T3, 15 A / internal per phase | |
| Power Factor Correction P.F.C. | 0,7 | |

| Output | WRA 480-24 | WRA 480-48 |
|-------------------------------------|--|------------|
| Rated voltage output | DC 24 V | DC 48 V |
| Rated current output | 20 A | 10 A |
| Voltage trim range | 22.5 – 28.5 V | 47–56 V |
| Accuracy | 1 % | |
| Line regulation | ±1 % | |
| Load regulation | Single ±1 %, Parallel ±5 % | |
| Transient recovery time | 1.0 ms | |
| Temperature coefficient | ±0.02 % / °C | |
| Ripple & Noise | 100 mV | |
| Hold up time | min. 20 ms | |
| Status indication DC ON (LED green) | < 17.6/19.4 V | < 37/43 V |
| Status indication DC LOW (LED red) | < 17.6/19.4 V | < 37/43 V |
| Parallel mode | max. 3 units at 90% load current, manual switch | |
| Efficiency | 90 % | |
| Rated over load protection | 115–135 % | |
| Over voltage protection | 125–137 % | 125–142 % |
| Short circuit characteristics | Current limit (C) / Hiccup-mode (D), with switch C/D | |

| General | | |
|-----------------------------------|---|--|
| Switching frequency | min. 100 kHz | |
| Insulation voltage input/output | 3.0 kV _{eff} | |
| Insulation resistance at DC 500 V | 100 MΩ | |
| Operation temperature range | -25°C – 71°C (Derating) | |
| Derating | -2.5% / °C starting at 61 °C | |
| Storage temperature range | -25 °C – 85 °C | |
| M.T.B.F. | 210000 h | |
| Relative humidity | 20–95% RH | |
| Dimensions (w × h × d) | 150.0 × 125.0 × 116.0 mm | |
| Cooling | Air convection | |
| Housing material | metal | |
| Field installation | rail TS 35 (EN 50022) | |
| Installation position | vertical | |
| IP rating | IP 20 | |
| Protection class | – | |
| Weight (kg/piece) | 1.750 | |
| Termination | Screw terminal: 0.2–6.0 mm ² | |
| Approvals | UL: UL 508 listed cUL: UL 60950-1 accepted TÜV: EN 60950-1; CE: EN 61000-6-3 / EN 55022 Class B EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 55024 | |

| Monitoring | | |
|---------------------|---------------|---|
| DC ON Control (Rdy) | Normally open | – |
| Switching voltage | DC 60 V | – |
| Switching current | max. 300 mA | – |
| Switching capacity | – | – |
| Insulation voltage | DC 500 V | – |

Terminal connexion

| Description | Description |
|-------------|-------------------|
| V+ | Output terminal + |
| V- | Output terminal - |
| ≡ | PE- connection |
| L1,L2,L3 | Input terminal |

Power supply - regulated, 960 W, 3-phase

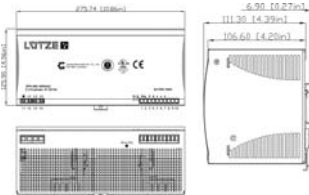
Primary switchmode power supply, PFC, 3-phase, screw terminal

Input: Wide range input AC 340 - 576 V; DC 480 - 820 V

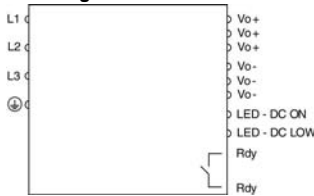
Output: 24 V / 48 V - adjustable



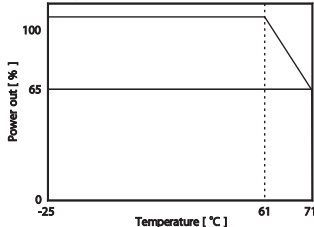
Dimensions



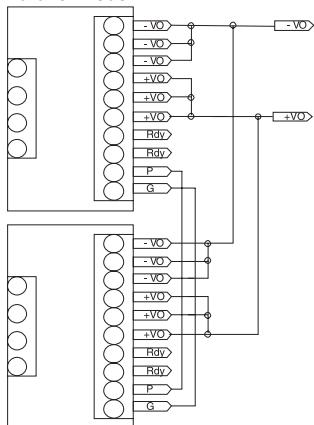
PIN assignment



Derating



Parallel mode



| Description | Part-No. | Type | PU | |
|------------------------|---------------|--------|------------|---|
| Screw terminal | | | | |
| Output voltage/current | DC 24 V; 40 A | 722806 | WRA 960-24 | 1 |
| | DC 48 V; 20 A | 722810 | WRA 960-48 | 1 |

| Input | WRA 960-24 | WRA 960-48 |
|--------------------------------|---|--------------|
| Rated voltage | | AC 400–500 V |
| Operation voltage range | AC 340–575 V; DC 480–820 V | |
| Line frequency | 47 – 63 Hz | |
| Rated current | $V_{in} = 400 \text{ V}$; AC: 2,4 A / $V_{in} = 480 \text{ V}$; AC: 1,6 A | |
| Inrush current | 30 A | |
| Input fuse | T6, 3 A / internal per phase | |
| Power Factor Correction P.F.C. | 0,7 | |

| Output | WRA 960-24 | WRA 960-48 |
|-------------------------|----------------------------|------------|
| Rated voltage output | DC 24 V | DC 48 V |
| Rated current output | 40 A | 20 A |
| Voltage trim range | 22.5–28.5 V | 47–56 V |
| Accuracy | 1 % | |
| Line regulation | ±1 % | |
| Load regulation | Single ±1 %, Parallel ±5 % | |
| Transient recovery time | – | |
| Temperature coefficient | ±0.02 % / °C | |
| Ripple & Noise | 80 mV | |
| Hold up time | min. 20 ms | |

| | | |
|-------------------------------------|---|-----------|
| Status indication DC ON (LED green) | >17.6–19.4 V | <37/43 V |
| Status indication DC LOW (LED red) | >17.6–19.4 V | <37/43 V |
| Parallel mode | max. 2 units at 90% load current, terminal P, G for current share | |
| Efficiency | 92 % | |
| Rated over load protection | Rated over load protection: 110 % –130 % | |
| Over voltage protection | 125–137 % | 125–142 % |
| Short circuit characteristics | Current limit | |

| General | | |
|-----------------------------------|---|--|
| Switching frequency | min. 100 kHz | |
| Insulation voltage input/output | 3.0 kV _{eff} | |
| Insulation resistance at DC 500 V | 100 MΩ | |
| Operation temperature range | -25°C – 71°C (Derating) | |
| Derating | -3.5% / °C starting at 61°C | |
| Storage temperature range | -25 °C – 85 °C | |
| M.T.B.F. | 210000 h | |
| Relative humidity | 20–95% RH | |
| Dimensions (w x h x d) | 276.0 x 125.0 x 118.0 mm | |
| Cooling | Air convection | |
| Housing material | metal | |
| Field installation | rail TS 35 (EN 50022) | |
| Installation position | vertical | |
| IP rating | IP 20 | |
| Protection class | – | |
| Weight (kg/piece) | 3,200 | |
| Termination | Screw terminal: 0.2–6.0 mm ² | |
| Approvals | UL: UL 508 listed cUL: UL 60950-1 accepted TÜV: EN 60950-1; CE: EN 61000-6-3 / EN 55022 Class B EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 55024 | |

| Monitoring | | |
|---------------------|---------------|---|
| DC ON Control (Rdy) | Normally open | – |
| Switching voltage | DC 60 V | – |
| Switching current | max. 300 mA | – |
| Switching capacity | – | – |
| Insulation voltage | DC 500 V | – |

Terminal connexion

| | |
|-------------|-------------------|
| Description | Description |
| V+ | Output terminal + |
| V- | Output terminal - |
| ⊥ | PE- connection |
| L1,L2,L3 | Input terminal |

Power supply - regulated, 50 W

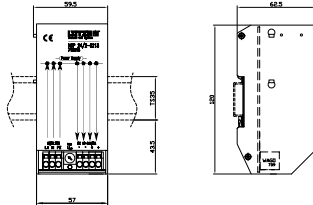
Primary switchmode power supply, Single-phase, spring terminal

Input: AC 170 – 264 V

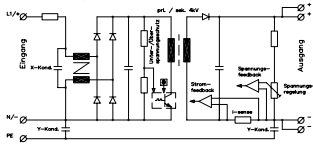
Output: 10–24 V - adjustable



Dimensions



PIN assignment



| Description | Part-No. | Type | PU |
|-------------------------------------|-------------------|--|---------------|
| Spring terminal | | | |
| Output voltage/current | DC 24 V; 2 A | 716213 | NGP 24/2-6213 |
| | | | 1 |
| Input | | | |
| NGP 24/2-6213 | | | |
| Rated voltage | | AC 230 V | |
| Operation voltage range | | AC 170–264 V | |
| Line frequency | | 47 – 63 Hz | |
| Rated current | | V _{in} =230 V; AC: 350 mA | |
| Inrush current | | V _{in} =230 V; AC: 10 A | |
| Input fuse | | recommended back-up fuse: MT 1A / 250 V | |
| Power Factor Correction P.F.C. | | – | |
| Output | | | |
| Rated voltage output | | DC 24 V (delivery status) | |
| Rated current output | | 2 A | |
| Voltage trim range | | 10 – 24 V | |
| Accuracy | | <1 % | |
| Line regulation | | – | |
| Load regulation | | – | |
| Transient recovery time | | 5.0 ms | |
| Temperature coefficient | | – | |
| Ripple & Noise | | 160 mV | |
| Hold up time | | V _{in} = 230 V: 10 ms | |
| Status indication DC ON (LED green) | | Yes | |
| Status indication DC LOW (LED red) | | – | |
| Parallel mode | | No | |
| Efficiency | | 85 % | |
| Rated over load protection | | 110–150 % | |
| Over voltage protection | | 120–136 % | |
| Short circuit characteristics | | Hiccup-mode | |
| General | | | |
| Switching frequency | | min. 100 kHz | |
| Insulation voltage input/output | | 4.0 kV _{eff} | |
| Insulation resistance at DC 500 V | | – MΩ | |
| Operation temperature range | | – | |
| Derating | | No | |
| Storage temperature range | | -40 °C – 85 °C | |
| M.T.B.F. | | – h | |
| Relative humidity | | 20–80 % RH | |
| Dimensions (w x h x d) | | 59.5 x 120.0 x 62.5 mm | |
| Cooling | | Air convection | |
| Housing material | | metal | |
| Field installation | | rail TS 35 (EN 50022) | |
| Installation position | | vertical | |
| IP rating | | IP 20 | |
| Protection class | | 1 | |
| Weight (kg/piece) | | 0.240 | |
| Termination | | Spring terminal 0.2–2.0 mm ² | |
| Approvals | | CE: EN 55022; Class B; EN 50081-1; EN 50082-2 cULus submitted | |
| Monitoring | | | |
| DC ON Control (Rdy) | | – | |
| Switching voltage | | – | |
| Switching current | | – | |
| Switching capacity | | – | |
| Insulation voltage | | – | |
| Terminal connexion | | | |
| Description | Description | | |
| V+ | Output terminal + | | |
| V- | Output terminal - | | |
| ⊥ | PE- connection | | |
| N | input terminal | | |
| L | input terminal | | |

Power supply - unregulated, 60–360 Watt

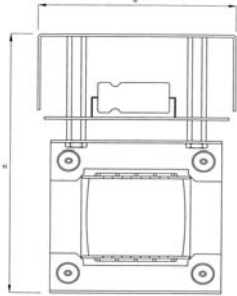
Power supply unit, Single-phase, unregulated, screw terminal

Input: AC 115 V / 230 V / 400 V

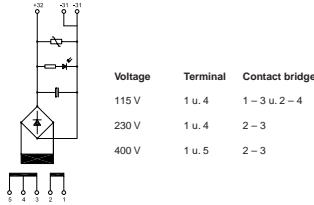
Output: DC 24 V



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-----------------------|--------------|--------|----------------|---|
| Screw terminal | | | | |
| Rated voltage | DC 24V; 2.5A | 722962 | NG 24/2,5-2962 | 1 |
| | DC 24V; 5A | 722963 | NG 24/5-2963 | 1 |
| | DC 24V; 10A | 722972 | NG 24/10-2972 | 1 |
| | DC 24V; 15A | 722973 | NG 24/15-2973 | 1 |

| Input | NG 24/2,5-2962 | NG 24/5-2963 | NG 24/10-2972 | NG 24/15-2973 |
|--------------------------|---|--------------------------------|--------------------------------|---------------------------------|
| Input voltage | AC 115 / 230 / 400V | | | |
| Operation voltage range | AC 104–196V / AC 207–224V / AC 360–424V | | | |
| Line frequency | 47 – 63 Hz | | | |
| Rated current | 1.6A / 0.6A / 0.4A | 2.4A / 1.1A / 0.6A | 5.0A / 2.4A / 1.8A | 6.0A / 3.2A / 2.0A |
| Rated power | 60 W | 120 W | 240 W | 360 W |
| Recommended back-up fuse | 115V: 4A / 230V: 2A / 400V: 1A | 115V: 4A / 230V: 2A / 400V: 2A | 115V: 6A / 230V: 4A / 400V: 2A | 115V: 10A / 230V: 6A / 400V: 4A |

Termination Screw terminal with additional flat connector: 0.5–6.0mm²

Output

| | | | | |
|-------------------------------------|--|------|---------|------|
| Rated voltage output | DC 24 V | | | |
| Rated current output | 2.5 A | 5 A | 10 A | 15 A |
| Rated voltage | at open-circuit 30.2 V, at full load: 20.4 V | | | |
| Line regulation | – | | | |
| Load regulation | – | | | |
| Transient recovery time | – | | | |
| Temperature coefficient | – | | | |
| Ripple & Noise | 650 mV | | 1200 mV | |
| Ripple | 2.2–2.7 % | | – | |
| Hold up time | – | | | |
| Status indication DC ON (LED green) | Yes | | | |
| Status indication DC LOW (LED red) | – | | | |
| Parallel mode | with 90% load current | | | |
| Efficiency | 73 % | 77 % | 80 % | |
| Rated over load protection | No | | | |
| Short circuit characteristics | – | | | |
| Output circuit | Varistor and capacitor | | | |
| Termination | Screw terminal 0.5–10 mm ² | | | |

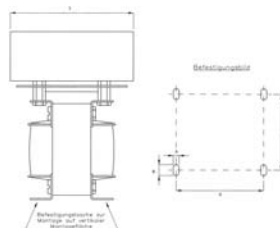
General

| | | | | |
|---------------------------------|--|--------------------|--------------------|--------------------|
| Switching frequency | – | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Insulation class | T 40 / B | | | |
| Insulation class | according to VDE B, UL/CSA: class 130 | | | |
| Operation temperature range | -25 °C – 80 °C | | | |
| Derating | – | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Relative humidity | 80% occasional condensation possible | | | |
| Dimensions (w x h x d) | 85 x 137 x 98 mm | 106 x 160 x 113 mm | 121 x 170 x 128 mm | 151 x 200 x 145 mm |
| Cooling | Air convection | | | |
| Housing material | metal | | | |
| Field installation | Screw termination: 0.5–4.0 mm ² | | | |
| Assembly borehole | 64 x 64.5 mm/M 5 | 83 x 80.5 mm/M 5 | 104 x 90 mm/M 5 | 90 x 122 mm/M 6 |
| Cu application weight | 0,62 kg/piece | 0,6 kg/piece | 0,9 kg/piece | 1,5 kg/piece |
| Installation position | Optional | | | |
| IP rating | IP 00 | | | |
| IP rating | I | | | |
| Weight (kg/piece) | 2.300 | 4.900 | 7.500 | 9.000 |
| Standards | Transformer compliant with IEC 61-558, Output limit values compliant with EN 61 131-2 EMC compliant with EN 50 081-1 and EN 50 082-2, Main connection compliant with EN 61 000-3-2 | | | |

Approvals

cULus

Fixing



Power supply - unregulated, 72–240 Watt

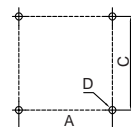
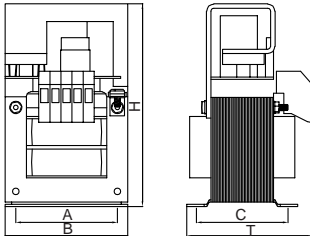
Power supply unit, Single-phase, unregulated, screw terminal

Input: AC 230 V / 400 V

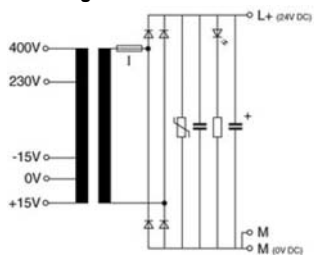
Output: DC 24 V



Dimensions

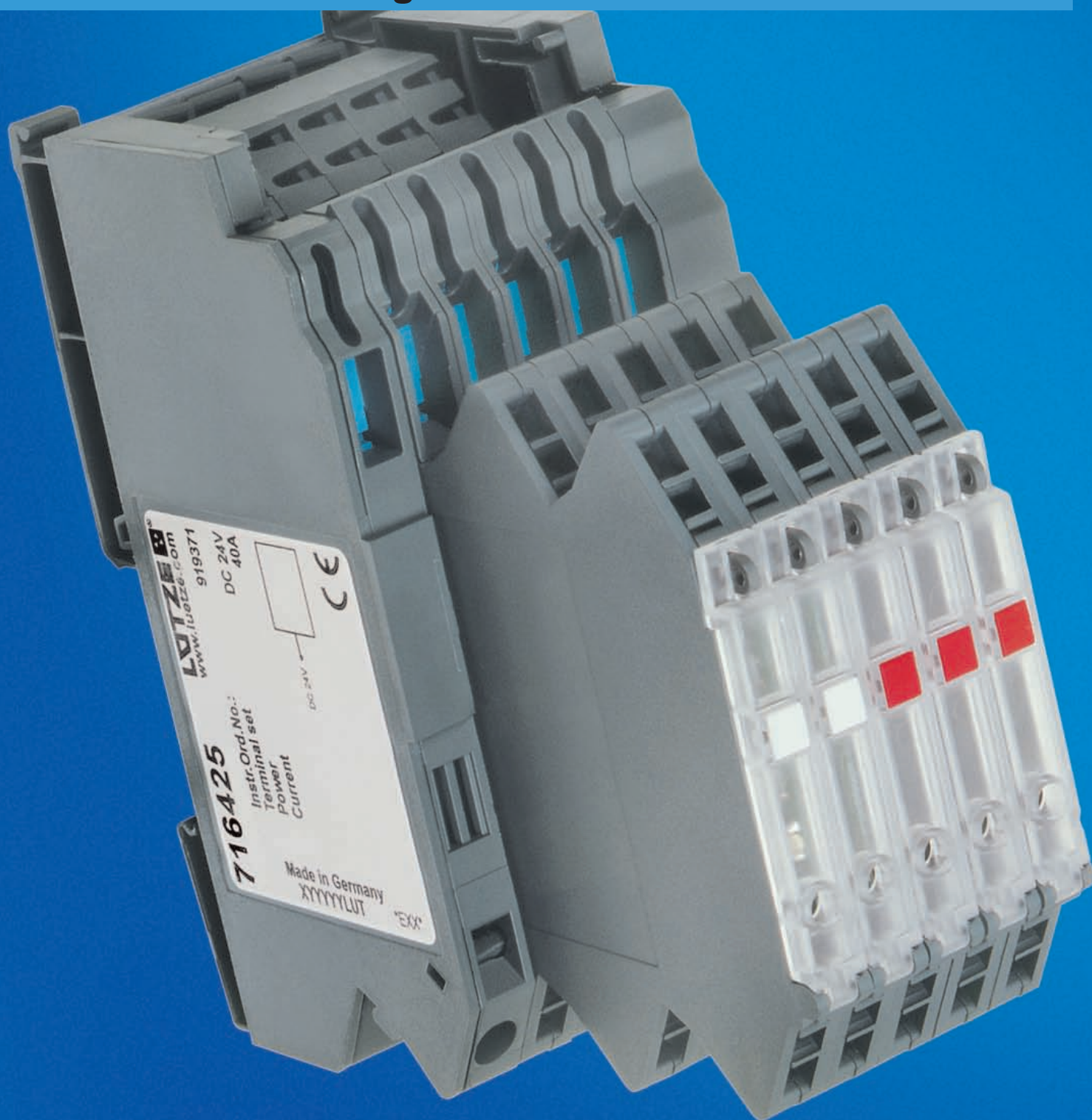


PIN assignment



| Description | Part-No. | Type | PU |
|-------------------------------------|--|----------------------------------|----------------------------------|
| Screw terminal | | | |
| Rated voltage | 722620 | NG 24/3-2620 with fusing | 1 |
| | 722621 | NG 24/36-2621 with fusing | 1 |
| | 722622 | NG 24/10-2622 with fusing | 1 |
| Input | | | |
| | NG 24/3-2620 with fusing | NG 24/36-2621 with fusing | NG 24/10-2622 with fusing |
| Input voltage | AC 230 / 400V | | |
| Operation voltage range | AC 207–244V / AC 360–424V | | |
| Line frequency | 47 – 63 Hz | | |
| Rated current | 0.7A / 0.5A | 1.2A / 0.8A | 2.4A / 1.6A |
| Rated power | 72 W | 144 W | 240 W |
| Recommended back-up fuse | 4 A / 2 A / 1 A | 4 A / 2 A / 2 A | 6 A / 4 A / 2 A |
| Termination | Screw terminal with additional flat connector: 0.5–6.0 mm ² | | |
| Output | | | |
| Rated voltage output | – | | |
| Rated current output | 3 A | 6 A | 10 A |
| Rated voltage | at open-circuit 30.2 V, at full load: 20.4 V | | |
| Line regulation | – | | |
| Load regulation | – | | |
| Transient recovery time | – | | |
| Temperature coefficient | – | | |
| Ripple & Noise | – mV | | |
| Ripple | < 5% | | |
| Hold up time | – | | |
| Status indication DC ON (LED green) | Yes | | |
| Status indication DC LOW (LED red) | – | | |
| Parallel mode | with 90% load current | | |
| Efficiency | 77 % | | |
| Rated over load protection | yes | | |
| Short circuit characteristics | – | | |
| Output circuit | Varistor and capacitor | | |
| Termination | Screw terminal: 0.5–4.0 mm ² | | |
| General | | | |
| Switching frequency | – | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | |
| Insulation class | T 40 / B | | |
| Insulation class | according to VDE B, UL/CSA: class 130 | | |
| Operation temperature range | -25 °C – 80 °C | | |
| Derating | – | | |
| Storage temperature range | -40 °C – 80 °C | | |
| Relative humidity | 80% occasional condensation possible | | |
| Dimensions (w x h x d) | 84 x 146 x 77 mm | 96 x 156 x 103 mm | 120 x 174 x 102 mm |
| Cooling | Air convection | | |
| Housing material | metal | | |
| Field installation | Screw terminal: 0.5–4.0 mm ² | | |
| Assembly borehole | 65 mm x 64 mm/M 4 | 86,5 mm x 84 mm/M 5 | 85 mm x 90 mm/M 5 |
| Cu application weight | 0,3 kg/piece | 0,5 kg/piece | 1 kg/piece |
| Installation position | Optional | | |
| IP rating | IP 00 | | |
| IP rating | I | | |
| Weight (kg/piece) | 2.300 | 3.900 | 5.600 |
| Standards | Transformer compliant with IEC 61-558, Output limit values compliant with EN 61 131-2 EMC compliant with EN 50 081-1 and EN 50 082-2, Main connection compliant with EN 61 000-3-2 | | |
| Approvals | cULus | | |

3. Load Monitoring



Interface Technology · Load Monitoring



8,1mm Microcompact



65mm Varioprint



22,5mm Varioprint

Load Monitoring

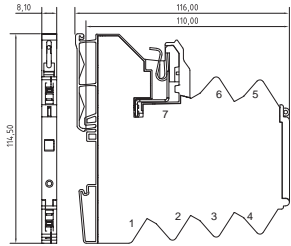
| Monitoring | | Number of channels | | | Fault indication | | | max. Current Range | | | | | Connection | | Housing | | | Page | |
|------------|---------|--------------------|-----------|-----------|------------------|-------|--------|--------------------|-----|-------|-----|------|----------------|-----------------|---------------------|--------------------|------------------|------|-----|
| electronic | thermic | 1-channel | 4-channel | 6-channel | without | Relay | Signal | 2,5 A | 4 A | 6,3 A | 8 A | 10 A | Screw terminal | Spring terminal | 8,1 mm Microcompact | 22,5 mm Varioprint | 65 mm Varioprint | | |
| • | | • | | | | | • | | | | | • | | | | | | | 3.3 |
| | • | | • | | | • | | | • | | | | | • | | | • | | 3.4 |
| | • | | • | | | • | | | | • | | | | • | | | • | | 3.4 |
| | • | | • | | • | • | | | | • | | | • | | | • | | | 3.5 |
| | • | | | • | | • | | • | | | | | • | | | | • | | 3.5 |

Load monitoring - Microcompact LOCC Box

Electronic load monitoring up to DC 10 A, single-channel design
 adjustable current range: DC 1A–10A
 adjustable characteristic: fast-acting, medium-slow, slow

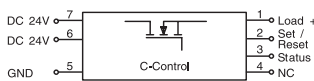


Dimensions



PIN assignment

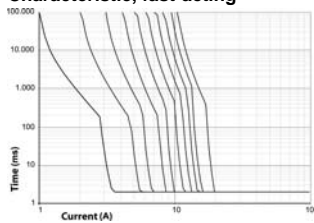
716400



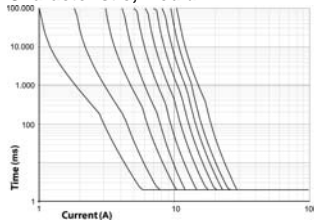
716400

- 1: +Output
- 2: Controller input (Reset)
- 3: Status Output
- 4: not occupied
- 5: 0V
- 6: +Supply (alternative)
- 7: +Supply

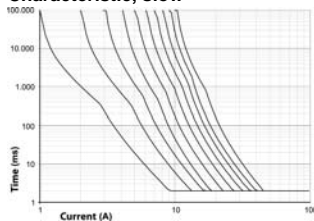
Characteristic, fast-acting



Characteristic, medium



Characteristic, slow



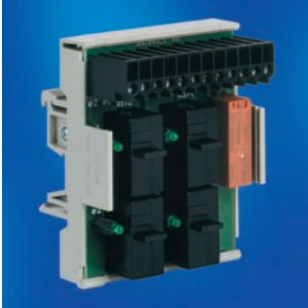
| Description | Part-No. | Type | PU |
|---|--|----------------|---------------------|
| Spring terminal | | | |
| Rated voltage | DC 24 V | 716400 | LOCC-Box-FB 7-6400 |
| Input | | | |
| Rated voltage | DC 24 V | | |
| Operation voltage range | DC 18 V – 32 V | | |
| Rated current | – | | |
| Supply current | DC 40 A over Cu-rails 10 x 3 mm | | |
| Reverse voltage protection | internal electronics | | |
| Termination | screwless disconnect slide | | |
| Control input (Set / Reset) | | | |
| Signal level | DC 24 V (EN 61131) | | |
| Fall time | Pulse with falling edge >100 ms, <800 ms | | |
| Rise time | Pulse with falling edge > 1 s | | |
| Connection | Spring terminal 0.25–2.5 mm ² | | |
| Output | | | |
| Switching element | MosFet | | |
| Output current | max. DC 10 A | | |
| Voltage drop | < 170 mV (10 A) | | |
| Status Indication | LED green: Operating voltage present, no error LED red: Error in load circuit | | |
| Switch-on capacity | 10000 µF | | |
| Current range | 1 A – 10 A (adjustable via switch in 1 A steps) | | |
| Turn-off times | adjustable characteristic: fast-acting, medium-slow, slow | | |
| Signal output | | | |
| Signal level | DC 24 V: Operating voltage present, no error; DC 0 V: Error, output switched off | | |
| Switching element | Transistor, collector with pull-up resistance | | |
| General | | | |
| Housing material | PA 6.6 (UL 94-V0; NFF 12, F2) | | |
| Field installation | rail TS 35 (EN 50022) | | |
| IP rating | IP 20 | | |
| Installation position | Optional | | |
| Termination | Spring terminal 0.25–2.5 mm ² | | |
| Operation temperature range | –25 – 50 °C | | |
| Storage temperature range | –40 – 85 °C | | |
| Dimensions (w x h x d) | 8.1 x 114.5 x 116.0 mm | | |
| Weight (kg/piece) | 0.120 | | |
| Approvals | cULus, Class 1 Div 2 in preparation | | |
| Standards | EN 60950-1; EN 61131-1,2; EN 61000; EN 60947-4-1; EN 55022 | | |
| Accessories | | | |
| | Colour | Article number | Description |
| Feed in set (feed in terminal and end terminal 6mm ²) | | 716425 | LOCC-Box-ES 7-6425 |
| Copper bus bar 1m | | 716426 | LOCC-Box-CU 7-6426 |
| Cu-rail covering 1m | | 716427 | LOCC-Box-AD 7-6427 |
| Jumper comb 8 pole, 6A | white | 716428 | LOCC-Box-BKW 7-6428 |
| Jumper comb 8 pole, 6A | red | 716429 | LOCC-Box-BKR 7-6429 |
| Jumper comb 8 pole, 6A | blue | 716430 | LOCC-Box-BKB 7-6430 |
| Marker holder (200 pcs.) | white | 716431 | LOCC-Box-BZW 7-6431 |
| Marker holder (200 pcs.) | red | 716432 | LOCC-Box-BZR 7-6432 |
| Marker holder (200 pcs.) | blue | 716433 | LOCC-Box-BKB 7-6433 |
| Marker holder (200 pcs.) | yellow | 716434 | LOCC-Box-BZG 7-6434 |

Load monitoring - Varioprint fuse module

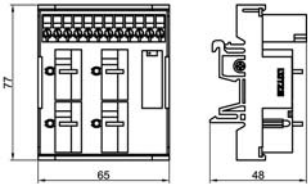
DC Load monitoring with thermal fuse, resettable

4 monitoring circuits 4 A / 8 A

Group signal using potential-free relay contact, optical single-channel signal



Dimensions

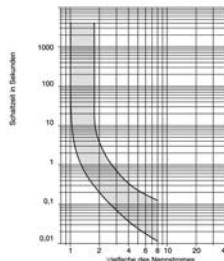


| Description | Part-No. | Type | PU | |
|---|--|--|--|--|
| Load monitoring 4x4 A | | | | |
| Termination | Screw terminal 710821 | SIPE 4-0821 24 V 4x4A | 2 | |
| Termination | Spring terminal 710822 | SIPE 4-0822 24V 4x4A | 2 | |
| Load monitoring 4x8 A | | | | |
| Termination | Screw terminal 710823 | SIPE 4-0823 24V 4x8A | 2 | |
| Termination | Spring terminal 710824 | SIPE 4-0824 24V 4x8A | 2 | |
| Input | | | | |
| | 710821 | 710823 | 710822 | 710824 |
| Rated voltage | DC 24 V | | | |
| Input voltage range | 16.8 – 30.0 V | | | |
| Rated current | 4 x DC 4 A (max. 10 x I _N) | 4 x DC 8 A (max. 10 x I _N) | 4 x DC 4 A (max. 10 x I _N) | 4 x DC 8 A (max. 10 x I _N) |
| Fuse | circuit breaker with thermal tripping characteristic | | | |
| Resistor | (interior) <0.1 Ω | | | |
| Status indication | 4 x LED green | | | |
| Rated insulation voltage (EN 50178) | 50 V | | | |
| Pollution degree | – | | | |
| Overvoltage category | – | | | |
| Signal circuit | | | | |
| Switching element | Relay | | | |
| Contact type | 1 change over contact | | | |
| Min. switching voltage | AC/DC 17 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AC/DC 0.10 mA | | | |
| Max. switching current | AC/DC 3 A | | | |
| Switch-on delay | 8 ms | | | |
| Switch-off delay | 8 ms | | | |
| Switching capacity | max. 2000 VA | | | |
| Contact material | AgNi + 0.15 HV | | | |
| Mechanical service life | 2 x 10 ⁷ operations | | | |
| Rated insulation voltage (EN 40178) | 300 V | | | |
| Clearance/creep. dist. (contol/load side) | >2 mm | | | |
| General | | | | |
| Design | Varioprint | | | |
| IP rating | IP 20 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Insulation voltage input/output | – | | | |
| Safe isolation | – | | | |
| Operation temperature range | -20 – 60 °C | | | |
| Storage temperature range | -25 – 80 °C | | | |
| Dimensions (w x h x d) | 65.0 x 77.0 x 48.0 mm | | | |
| Weight (kg/piece) | 0.098 | | | |
| Approvals | – | | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | Spring terminal 0.25–2.5 mm ² | |

Comments

Hard gold-plated contacts: So that the gold layer is not damaged, the specified values should not be exceeded. At higher switching capacity, the gold layer vaporizes. The deposition in the housing can lead to sparkovers between the coil and contact.

Switching capacity



Load monitoring - Varioprint fuse module

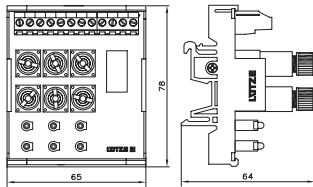
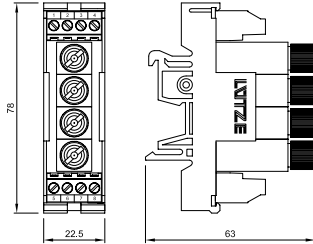
AC/DC Load monitoring with fuse (5 × 20 mm)

Monitoring circuits 2.5 A und 6.3 A

Group signal using potential-free relay contact (only 716123)

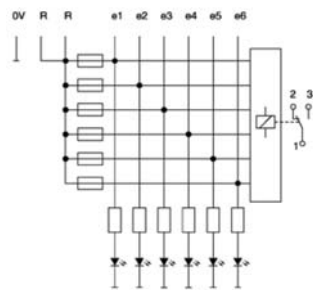


Dimensions

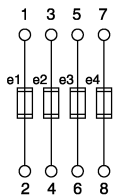


PIN assignment

716123

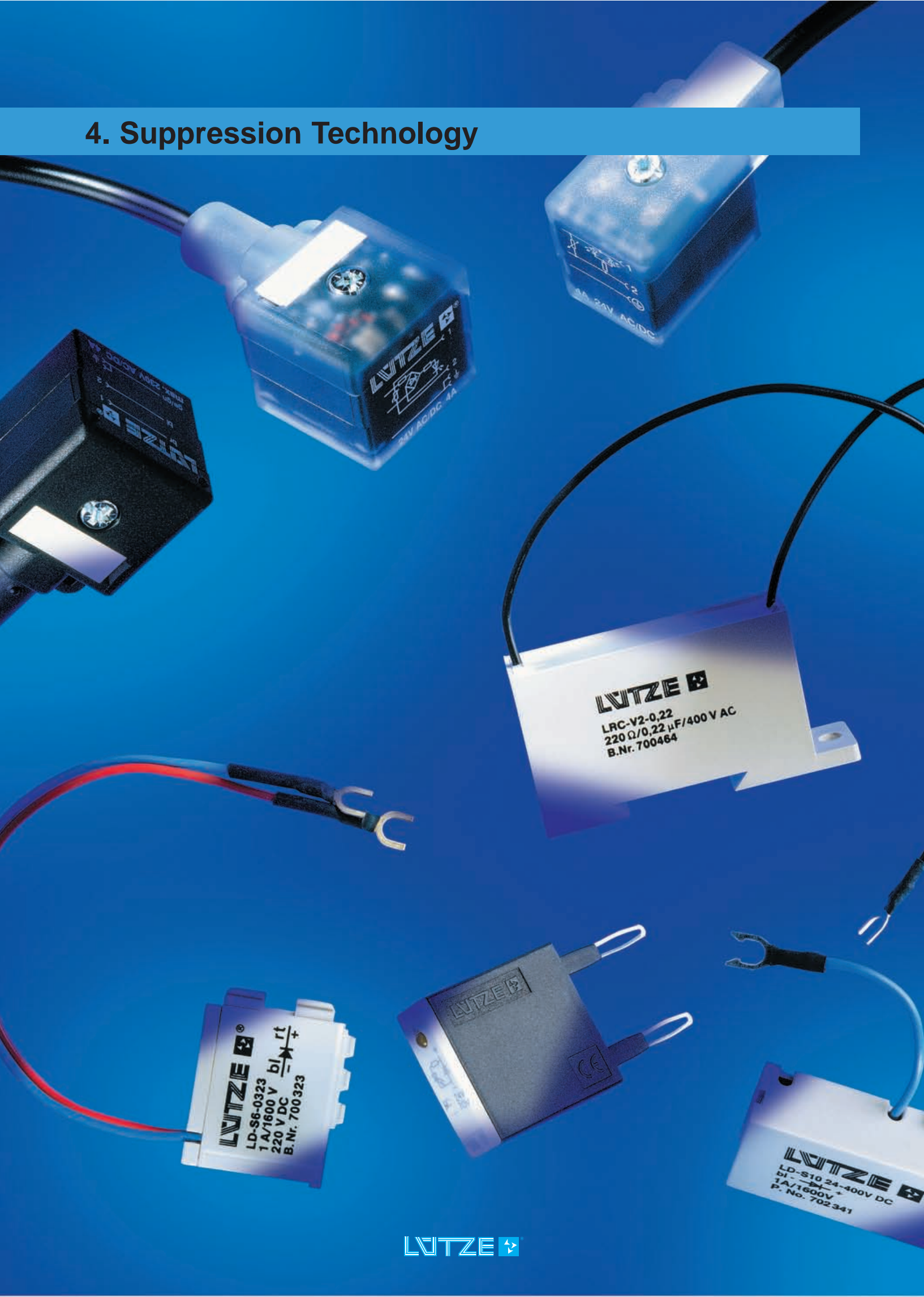


710820



| Description | Part-No. | Type | PU |
|---|--|-------------------------|-------------------|
| Load monitoring 6x2.5 A | | | |
| Termination | 716123 | SIPE-6LED-6123 DC 24 V | 1 |
| Load monitoring 4x6.3 A | | | |
| Termination | 710820 | SIPE-4-0820 AC/DC 250 V | 2 |
| Input | 716123 | 710820 | |
| Rated voltage | DC 24 V | AC/DC 230 V | |
| Input voltage range | 16.8 – 30.0 V | 0.0 – 250.0 V | |
| Rated current | 6 × DC 2.5 A | 4 × DC 6.3 A | |
| Fuse | Glass tube 5x20 mm, not included in delivery | | |
| Resistor | <0.1 Ω | | |
| Status indication | – | 4 × LED green | |
| Rated insulation voltage (EN 50178) | 150 V | 300 V | |
| Pollution degree | 2 | | |
| Overvoltage category | I | | |
| Signal circuit | | | |
| Switching element | Relay | – | |
| Contact type | 1 change over contact | – | |
| Min. switching voltage | AC/DC 17 V | – | |
| Max. switching voltage | AC/DC 250 V | – | |
| Min. switching current | AC/DC 0.10 mA | – | |
| Max. switching current | AC/DC 3 A | – | |
| Switch-on delay | 8 ms | – | |
| Switch-off delay | 8 ms | – | |
| Switching capacity | max. 1250 VA | – | |
| Contact material | AgNi | – | |
| Mechanical service life | 2 × 10 ⁷ operations | – | |
| Rated insulation voltage (EN 40178) | | 250 V | |
| Clearance/creep. dist. (contol/load side) | >2 mm | – | |
| General | | | |
| Design | Varioprint | | |
| IP rating | IP 20 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Insulation voltage input/output | – | | |
| Safe isolation | – | | |
| Operation temperature range | -20 – 60 °C | | |
| Storage temperature range | -25 – 80 °C | | |
| Dimensions (w × h × d) | 65.0 × 77.0 × 63.0 mm | 22.5 × 77.0 × 63.0 mm | |
| Weight (kg/piece) | 0.116 | 0.070 | |
| Approvals | – | | |
| Termination | Screw terminal: 0.25–2.5 mm ² | | |
| Accessories | Article number | Description | Pkg. units |
| Identification unit | 710799 | | 100 |

4. Suppression Technology



Suppression Technology · Overview



S1, S2



S6



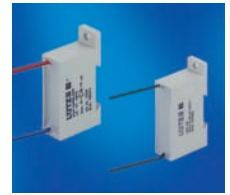
S10



S11



S12, S13



V1, V2, VM1

Suppressors for Switching Gear

| Form | Protective device | | | | | Nominal voltage | | | | | | | | Holding capacity | | | | | | | | Page | | | | | | | | |
|------------------|-------------------|---------------|----------|------------------|-----------|-----------------|----------------|-----------------|-----------------|---------|---------|----------|----------|------------------|-------------|-------------|---------------|------------|------------|------|-------|------|-------|-------|-------|-------|-------|-------|--------|------|
| | Diode | Diode and LED | Varistor | Varistor and LED | RC-module | DC 12 ... 250 V | DC 24 ... 70 V | DC .24 .. 230 V | DC .24 .. 400 V | AC 48 V | AC 60 V | AC 230 V | AC 400 V | AC/DC 24 V | AC/DC 115 V | AC/DC 230 V | 4000 V/0,25 A | 1600 V/1 A | 1300 V/3 A | 7 VA | 10 VA | | 20 VA | 30 VA | 32 VA | 40 VA | 60 VA | 70 VA | 200 VA | |
| S1, S2 | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.5 |
| S6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.5 |
| S10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.5 |
| S11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.10 |
| S12, S13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.10 |
| V1, V2, VM1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.10 |
| Diode | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.8 |
| Diode and LED | | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.9 |
| Varistor | | | • | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.8 |
| Varistor and LED | | | | • | | | | | | | | | | | | | | | | | | | | | | | | | | 4.9 |
| RC-module | | | | | • | | | | | | | | | | | | | | | | | | | | | | | | | 4.8 |
| DC 12 ... 250 V | | | | | | • | | | | | | | | | | | | | | | | | | | | | | | | 4.9 |
| DC 24 ... 70 V | | | | | | | • | | | | | | | | | | | | | | | | | | | | | | | 4.8 |
| DC .24 .. 230 V | | | | | | | | • | | | | | | | | | | | | | | | | | | | | | | 4.9 |
| DC .24 .. 400 V | | | | | | | | | • | | | | | | | | | | | | | | | | | | | | | 4.8 |
| AC 48 V | | | | | | | | | | • | | | | | | | | | | | | | | | | | | | | 4.9 |
| AC 60 V | | | | | | | | | | | • | | | | | | | | | | | | | | | | | | | 4.8 |
| AC 230 V | | | | | | | | | | | | • | | | | | | | | | | | | | | | | | | 4.9 |
| AC 400 V | | | | | | | | | | | | | • | | | | | | | | | | | | | | | | | 4.9 |
| AC/DC 24 V | | | | | | | | | | | | | | • | | | | | | | | | | | | | | | | 4.8 |
| AC/DC 115 V | | | | | | | | | | | | | | | • | | | | | | | | | | | | | | | 4.9 |
| AC/DC 230 V | | | | | | | | | | | | | | | | • | | | | | | | | | | | | | | 4.9 |
| 4000 V/0,25 A | | | | | | | | | | | | | | | | | • | | | | | | | | | | | | | 4.11 |
| 1600 V/1 A | | | | | | | | | | | | | | | | | | • | | | | | | | | | | | | 4.11 |
| 1300 V/3 A | | | | | | | | | | | | | | | | | | | • | | | | | | | | | | | 4.11 |
| 7 VA | | | | | | | | | | | | | | | | | | | | • | | | | | | | | | | 4.12 |
| 10 VA | | | | | | | | | | | | | | | | | | | | | • | | | | | | | | | 4.12 |
| 20 VA | | | | | | | | | | | | | | | | | | | | | | • | | | | | | | | 4.13 |
| 30 VA | | | | | | | | | | | | | | | | | | | | | | | • | | | | | | | 4.13 |
| 32 VA | | | | | | | | | | | | | | | | | | | | | | | | • | | | | | | 4.13 |
| 40 VA | | | | | | | | | | | | | | | | | | | | | | | | | • | | | | | 4.6 |
| 60 VA | | | | | | | | | | | | | | | | | | | | | | | | | | • | | | | 4.6 |
| 70 VA | | | | | | | | | | | | | | | | | | | | | | | | | | | • | | | 4.6 |
| 200 VA | | | | | | | | | | | | | | | | | | | | | | | | | | | | • | | 4.7 |

Suppression Technology · Overview



Form A Varistor



B, DIN/B, Industry



C, DIN/C, Industry



A (V8, V8T)



B, Industry (V5TI)
B, DIN (V5T)



C, Industry (V7)

Suppressor for Valves

| Form | | | | | Type | | Cable length | | | | Protective device | | | | | | Nominal voltage | | | | | Page | | |
|------|--------|--------------|--------|--------------|------|-----|--------------|-------|--------|--------|-------------------|---------|-----------------|-------------|---------------|------------------------|-----------------|---------------------|--------|-----------|------------|------------|------------------|---------|
| A | B, DIN | B, Industrie | C, DIN | C, Industrie | PUR | PVC | 2,5 m | 5,0 m | 10,0 m | 15,0 m | adjustable | without | RC-module + LED | Diode + LED | Z-Diode + LED | Suppressor-diode + LED | Varistor + LED | Varistor + RC + LED | DC 24V | AC/DC 24V | AC/DC 115V | AC/DC 230V | AC/DC 0 ... 230V | |
| • | | | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.14 |
| • | | | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.15 |
| • | | | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.16 |
| | • | | | | • | | • | • | • | • | | | | | | | | | • | | | | | ab 4.17 |
| | | • | | | • | | • | • | • | • | | | | | | | | | • | | | | | ab 4.19 |
| | | | • | | • | | • | • | • | • | | | | | | | | | • | | | | | ab 4.21 |
| | | | | • | • | | • | • | • | • | | | | | | | | | • | | | | | ab 4.23 |
| | | | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.25 |
| | | | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.26 |
| | | | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.27 |
| | | | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.28 |
| • | | | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.29 |
| | • | | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.30 |
| | | • | | | • | | • | • | • | • | | | | | | | | | • | | | | | 4.30 |

Suppressor with special functions

| Form | | | | | Type | | Cable length | | | | Protective device | | | Function | | | | | | | | | | Nominal voltage | | Page | | | | |
|------|--------|--------------|--|--|------|-----|--------------|-------|--------|--------|-------------------|---------|-------|------------------|----------|-------------|-----------------|----------------|--------------------|-------------------------|--------------------|------------------------|----------------|----------------------------|----------------------|--------|-------------------|--|--|------|
| A | B, DIN | B, Industrie | | | PUR | PVC | 2,5 m | 5,0 m | 10,0 m | 20,0 m | adjustable | without | Diode | Suppressor diode | Varistor | Dual valves | Pressure Switch | Energy reducer | fill level monitor | Switch, amplifier with- | out gal. isolation | Switch, amplifier with | gal. isolation | Current Voltage monitoring | 2 Cable entry points | DC 24V | AC/DC 0 ... 230 V | | | |
| • | | | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.31 |
| • | | | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.33 |
| • | | | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.32 |
| • | | | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.37 |
| • | | | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.34 |
| • | | | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.36 |
| • | | | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.35 |
| • | | | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.38 |
| | • | | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.39 |
| | | • | | | • | | • | • | • | • | | | | | | | | | | | | | | | | | | | | 4.39 |

Valve suppressors

| Form | | | | | Protective device | | | | | | | | Nominal voltage | | | | | | Holding capacity | | | | | | Page | | | | |
|-------------|--------------|---------------------|-------------------|--|-------------------|-------------|---------------|-----------|-----|----------------|------------------|-----------------|---------------------|--------|----------------|--------|---------|---------|------------------|------------|------------|------------|------------|------|------|------|-------|---|------|
| A (V8, V8T) | B, DIN (V5T) | B, Industrie (V5TI) | C, Industrie (V7) | | Diode | Diode + LED | Z-Diode + LED | Glow lamp | LED | Varistor + LED | Varistor +C+ LED | RC-module + LED | RC-mod. + Glow lamp | DC 24V | DC 24 ... 230V | AC 48V | AC 115V | AC 230V | AC/DC 24V | AC/DC 115V | AC/DC 230V | 1600V / 1A | 1300V / 3A | 10VA | 15VA | 50VA | 200VA | | |
| • | | | | | • | | | | | | | | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 4.40 |
| • | | | | | • | | | | | | | | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 4.41 |
| | • | | | | • | | | | | | | | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 4.42 |
| | | • | | | • | | | | | | | | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 4.42 |
| | | | • | | • | | | | | | | | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 4.43 |

Suppression Technology • Overview



M1, M2, M3



M5



RM1, RM2



S9, UC



S10



ST10



VM1, V1

Motor suppression

| Form | | | | | | | | | | Protection device | | Nominal voltage | | | Suppression device | | Holding capacity | | | | | | Page |
|------------|----|----------|----|-----|------|----|-----|----------|----------|-------------------|--------------|-----------------|-------|---------|--------------------|------|------------------|--------|-------|-------|---|------|------|
| M1, M2, M3 | M5 | RM1, RM2 | S9 | S10 | ST10 | UC | VM1 | Varistor | RC-Glied | AC 3 x 400 V | AC 3 x 500 V | AC 3 x 575 V | Stern | Dreieck | 2,5 kW | 4 kW | 5,5 kW | 7,5 kW | 15 kW | 30 kW | | | |
| • | | | | | | | | | • | • | | | | • | | • | • | • | • | • | • | 4.52 | |
| • | | | | | | | | | • | • | • | | | • | | • | • | • | • | • | • | 4.53 | |
| | • | | | | | | | | • | • | | • | | • | | • | • | • | • | • | • | 4.48 | |
| | | • | | | | | | | • | • | • | • | | • | | • | • | • | • | • | • | 4.47 | |
| | | | • | | | | | | • | • | • | • | | • | | • | • | • | • | • | • | 4.50 | |
| | | | | • | | | | | • | • | • | • | | • | | • | • | • | • | • | • | 4.46 | |
| | | | | | • | | | | • | • | • | • | | • | | • | • | • | • | • | • | 4.46 | |
| | | | | | | • | | | • | • | • | • | | • | | • | • | • | • | • | • | 4.44 | |
| | | | | | | | • | | • | • | • | • | | • | | • | • | • | • | • | • | 4.44 | |
| | | | | | | | | • | • | • | • | • | | • | | • | • | • | • | • | • | 4.51 | |
| | | | | | | | | • | • | • | • | • | | • | | • | • | • | • | • | • | 4.51 | |
| | | | | | | | | • | • | • | • | • | | • | | • | • | • | • | • | • | 4.49 | |
| | | | | | | | • | • | • | • | • | • | | • | | • | • | • | • | • | • | 4.45 | |

Components with special function

| Form | | | | | | | Function | | Nominal voltage | | Seite |
|------|----|----|--|--|--|--|-----------------|------------------|-----------------|------------------|-------|
| M3 | S2 | V1 | | | | | Switch-on delay | Switch-off delay | DC 24 V | AC/DC 24 - 230 V | |
| • | | | | | | | • | • | • | | 4.55 |
| | • | | | | | | • | • | • | | 4.54 |
| | | • | | | | | • | • | • | | 4.54 |

Suppression Technology - Suppressor for Switch Gear

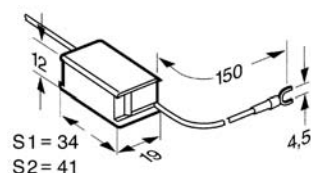
Universal Suppressor Module

Enclosure type: S1, S2

Protection device: Diode / Varistor / RC module



Dimensions

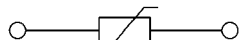


PIN assignment

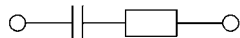
700445, 700446



700440, 700370, 700433



700411, 700414, 700413



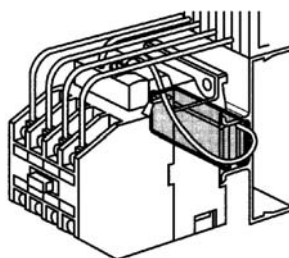
| Description | Part-No. | Type | PU | |
|------------------|----------|--------|---------------------------|----|
| Diode | | | | |
| Rated voltage | DC 230 V | 700445 | LD-S1-0445 DC 24-230 V | 10 |
| | DC 230 V | 700446 | LD-S1-0446 DC 24-230 V | 10 |
| varistor | | | | |
| Rated voltage | UC 24 V | 700440 | LV-S1-0440 AC/DC 24 V | 10 |
| | UC 115 V | 700370 | LV-S1-0370 AC/DC 60-115 V | 10 |
| | UC 230 V | 700433 | LV-S1-0433 AC/DC 230 V | 10 |
| RC module | | | | |
| Rated voltage | AC 48 V | 700411 | LRC-S2-0411 AC 24-60 V | 10 |
| | AC 230 V | 700414 | LRC-S2-0414 AC 115-230 V | 10 |
| | AC 230 V | 700413 | LRC-S2-0413 AC 115-230 V | 10 |

| Technical data | 700445 | 700446 | 700440 | 700370 | 700433 | 700411 | 700414 | 700413 |
|-----------------------------------|----------------------------|--------------|----------|----------|----------|-----------|--------|--------|
| Function type | Suppressor for Switch Gear | | | | | | | |
| Protection device | Diode | | varistor | | | RC module | | |
| Rated voltage | DC 230 V | UC 24 V | UC 115 V | UC 230 V | AC 48 V | AC 230 V | | |
| Shut-off points | ≤1 V | ≤52 V | ≤250 V | ≤475 V | | - | | |
| Rated frequency | - | | | | 50-60 Hz | | | |
| Inverse voltage/switching current | 1600 V / 1 A | 1300 V / 3 A | - | | | | | |
| Holding Capacity | - | | 60 VA | 200 VA | 20 VA | 10 VA | 20 VA | |
| Type of connecting lead | LIY 0.5 mm ² | | | | | | | |
| Length of connecting lead (M) | 0,15 M | | | | | | | |
| Termination | Fork-type cable lug M4 | | | | | | | |

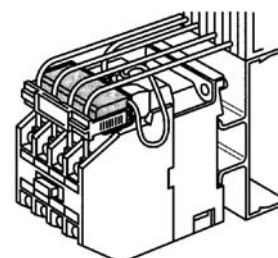
| General | S1 | S2 |
|-----------------------------|--|-------|
| Design | S1 | S2 |
| Status indication | - | |
| Housing material | Noryl | |
| IP rating | IP 67 | |
| Field installation | Insert in the rail profile or attach with retaining clips to the connection wires. (Accessories) | |
| Operation temperature range | 0 °C – 60 °C | |
| Storage temperature range | -20 °C – 80 °C | |
| Dimensions (w x h x d) | 34.0 x 19.0 x 12.0 mm | |
| Weight (kg/piece) | 0.010 | 0.012 |
| Standards | - | |
| Approvals | - | |

| Accessories | Colour | Article number | Description | Pkg. units |
|----------------------------|-------------|----------------|--|------------|
| Retaining clip for type S1 | transparent | 700409 | For the mounting to the connection wires | 100 |
| Retaining clip for type S2 | transparent | 700419 | For the mounting to the connection wires | 100 |

Mounting diagram



Mounting diagram



Suppression Technology - Suppressor for Switch Gear

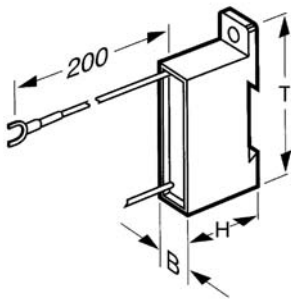
Universal Suppressor Module

Enclosure type: V1

Protection device: Diode / Varistor / RC module

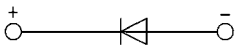


Dimensions

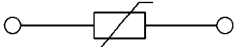


PIN assignment

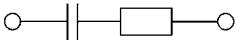
700475, 700476



700577, 700577, 700568, 700568,
700435, 700435



700466



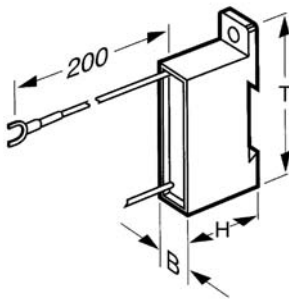
| Description | Part-No. | Type | PU | | | |
|-----------------------------------|--|-----------------------|---------------------------------|-------------------|---------------|---------------|
| Diode | | | | | | |
| Rated voltage | DC 230 V | 700475 | LD-V1-0475 DC 24-230 V | 10 | | |
| | DC 230 V | 700476 | LD-V1-0476 DC 24-230 V | 10 | | |
| varistor | | | | | | |
| Rated voltage | UC 24 V | 700577 | LV-V1-0577 AC/DC 24 V | 10 | | |
| | UC 115 V | 700568 | LV-V1-0568 AC/DC 60-115 V | 10 | | |
| | UC 230 V | 700435 | LV-V1-0435 AC/DC 230 V | 10 | | |
| RC module | | | | | | |
| Rated voltage | AC 230 V | 700466 | LRC-V1-0466 AC 115-230 V | 10 | | |
| Technical data | | | | | | |
| | 700475 | 700476 | 700577 | 700568 | 700435 | 700466 |
| Function type | Suppressor for Switch Gear | | | | | |
| Protection device | Diode | | varistor | | RC module | |
| Rated voltage | DC 230 V | | UC 24 V | UC 115 V | UC 230 V | AC 230 V |
| Shut-off points | ≤1 V | | ≤52 V | ≤250 V | ≤475 V | – |
| Rated frequency | – | | 50–60 Hz | | – | |
| Inverse voltage/switching current | 1600 V / 1 A 1300 V / 3 A | | – | | – | |
| Holding Capacity | – | | 200 VA | | 30 VA | |
| Type of connecting lead | LIY 0.5 mm ² | | | | | |
| Length of connecting lead (M) | 0,2 | | | | | |
| Termination | Fork-type cable lug M4 | | | | | |
| General | | | | | | |
| Design | V1 | | | | | |
| Pottant | 2-components | | | | | |
| Housing material | Noryl | | | | | |
| IP rating | IP 67 | | | | | |
| Field installation | With mounting hole M4, attachable to TS 35 (EN 50022) with 1 snap-on sockets | | | | | |
| Operation temperature range | -20 °C – 60 °C | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Dimensions (w x h x d) | 12.5 x 25.0 x 48.0 mm | | | | | |
| Weight (kg/piece) | 0.017 | | 0.020 | | 0.031 | |
| Standards | – | | | | | |
| Approvals | – | | | | | |
| Accessories | | | | | | |
| | Colour | Article number | Description | Pkg. units | | |
| Snap-on socket type 2 | grey | 700499 | for hat profile TS35 (EN 50022) | 10 | | |

Suppression Technology - Suppressor for Switch Gear

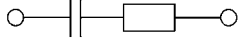
Universal Suppressor Module
Enclosure type: VM1, V2
Protection device: RC module



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|---------------------------------------|--|-----------------------|---------------------------------|-------------------|
| RC module in the V2 enclosure | | | | |
| Rated voltage | AC 230 V | 700462 | LRC-V2-0462 AC 115-230 V | 10 |
| | AC 400 V | 700464 | LRC-V2-0464 AC 230-400 V | 10 |
| | AC 400 V | 701583 | LRC-V2-1583 AC 230-400 V | 10 |
| RC module in the VM1 enclosure | | | | |
| Rated voltage | AC 230 V | 700463 | LRC-VM1-0463 AC 115-230 V | 10 |
| Technical data | | | | |
| | 700462 | 700464 | 701583 | 700463 |
| Function type | Suppressor for Switch Gear | | | |
| Protection device | RC module | | | |
| Rated voltage | AC 230 V | AC 400 V | AC 230 V | AC 230 V |
| Shut-off points | - | | | |
| Rated frequency | 50-60 Hz | | | |
| Inverse voltage/switching current | - | | | |
| Holding Capacity | 40 VA | 10 VA | 60 VA | 30 VA |
| Type of connecting lead | LIY 0.5 mm ² | | | |
| Length of connecting lead (M) | 0,2 | | | |
| Termination | Fork-type cable lug M4 | | | |
| General | | | | |
| Design | V2 | | VM1 | |
| Pottant | 2-components | | | |
| Housing material | Noryl | | | |
| IP rating | IP 67 | | | |
| Field installation | With mounting hole M4, attachable to TS 35 (EN 50022) with 2 snap-on sockets | | | |
| Operation temperature range | -20 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Dimensions (w x h x d) | 15.0 x 30.0 x 58.0 mm | | 15.0 x 41.0 x 48.0 mm | |
| Weight (kg/piece) | 0.030 | 0.028 | 0.031 | 0.033 |
| Standards | - | | | |
| Approvals | - | | | |
| Accessories | | | | |
| | Colour | Article number | Description | Pkg. units |
| Snap-on socket, hat profile TS35 | grey | 700499 | for hat profile TS35 (EN 50022) | 10 |

Suppression Technology - Suppressor for Switch Gear

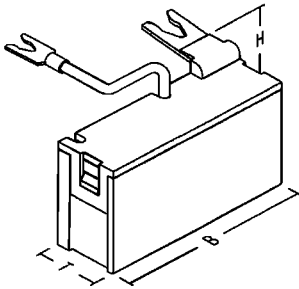
Universal suppressor module - for switches with one-sided solenoid connections

Enclosure type: S10, cable length 40 mm

Protection device: Diode / Varistor / RC module

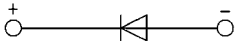


Dimensions

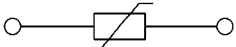


PIN assignment

702341



702344



702401, 702466



| Description | Part-No. | Type | PU | |
|-----------------------------------|--|---------------|-------------------------|---------------|
| Diode | | | | |
| Rated voltage | DC 400 V | 702341 | LD-S10-2341 DC 24-400 V | |
| varistor | | | | |
| Rated voltage | UC 24 V | 702344 | LV-S10-2344 AC/DC 24 V | |
| RC module | | | | |
| Rated voltage | AC 230 V | 702401 | LRC-S10-2401 AC 230 V | |
| | AC 230 V | 702466 | LRC-S10-2466 AC 230 V | |
| Technical data | | | | |
| | 702341 | 702344 | 702401 | 702466 |
| Function type | Suppressor for Switch Gear | | | |
| Protection device | Diode | varistor | RC module | |
| Rated voltage | DC 400 V | UC 24 V | AC 230 V | |
| Shut-off points | ≤1 V | ≤52 V | - | |
| Rated frequency | - | 50-60 Hz | | |
| Inverse voltage/switching current | 1600 V / 1 A | - | | |
| Holding Capacity | - | 70 VA | 10 VA | 32 VA |
| Type of connecting lead | LIY 0.5 mm ² , black | | | |
| Length of connecting lead (M) | 0,04 | | | |
| Termination | Fork-type cable lug M3.5 | | | |
| General | | | | |
| Design | S10 | | | |
| Pottant | 2-components | | | |
| Housing material | PA 6.6 | | | |
| IP rating | IP 67 | | | |
| Field installation | Directly pluggable at solenoid connections | | | |
| Operation temperature range | -20 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Dimensions (w x h x d) | 40.0 x 25.5 x 13.0 mm | | | |
| Weight (kg/piece) | 0.012 | 0.013 | 0.015 | |
| Standards | - | | | |
| Approvals | - | VDE, UL, CSA | | - |

Suppression Technology - Suppressor for Switch Gear

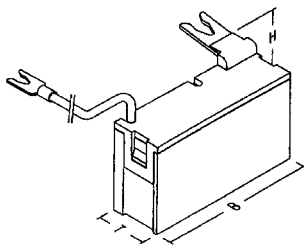
Universal suppressor module - for switches with one-sided solenoid connections

Enclosure type: S10, cable length 250 mm

Protection device: Diode / Varistor / RC module

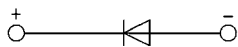


Dimensions

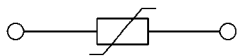


PIN assignment

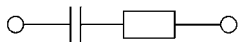
703341



703344



703401



| Description | Part-No. | Type | PU |
|-----------------------------------|--|---------------|---------------------------|
| Diode | | | |
| Rated voltage | DC 400 V | 703341 | LD-S10-3341 DC 24-400 V |
| varistor | | | |
| Rated voltage | UC 24 V | 703344 | LV-S10-3344 AC/DC 24 V |
| RC module | | | |
| Rated voltage | AC 230 V | 703401 | LRC-S10-3401 AC 110-230 V |
| Technical data | | | |
| | 703341 | 703344 | 703401 |
| Function type | Suppressor for Switch Gear | | |
| Protection device | Diode | varistor | RC module |
| Rated voltage | DC 400 V | UC 24 V | AC 230 V |
| Shut-off points | ≤1 V | ≤52 V | - |
| Rated frequency | - | 50-60 Hz | - |
| Inverse voltage/switching current | 1600 V / 1 A | - | - |
| Holding Capacity | - | 70 VA | 10 VA |
| Type of connecting lead | LIY 0.5 mm ² , black | | |
| Length of connecting lead (M) | 0,25 | | |
| Termination | Fork-type cable lug M3.5 | | |
| General | | | |
| Design | S10 | | |
| Pottant | 2-components | | |
| Housing material | PA 6.6 | | |
| IP rating | IP 67 | | |
| Field installation | directly pluggable at solenoid connections | | |
| Operation temperature range | -20 °C – 60 °C | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Dimensions (w x h x d) | 40.0 x 25.5 x 13.0 mm | | |
| Weight (kg/piece) | 0.017 | - | 0.018 |
| Standards | - | | |
| Approvals | - | | |

Suppression Technology - Suppressor for Switch Gear

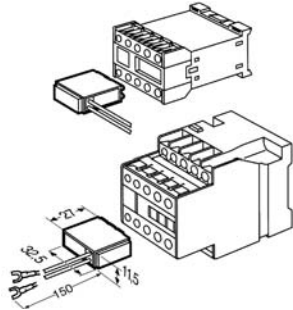
Universal suppressor module - for switches from Siemens, AEG, Moeller

Enclosure type S6

Protection device: Diode / Zener diode/ Varistor / RC module

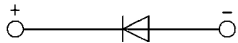


Dimensions



PIN assignment

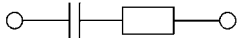
700323



700324, 700326



700322, 700321, 701321



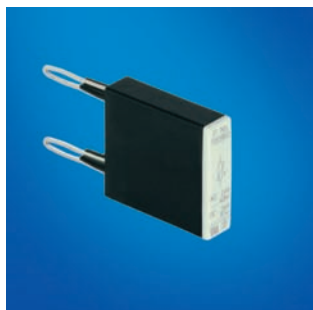
| Description | Part-No. | Type | PU | | | |
|-----------------------------------|--|---------------|--------------------------|---------------|---------------|---------------|
| Diode | | | | | | |
| Rated voltage | DC 230 V | 700323 | LD-S6-0323 DC 24-230 V | 10 | | |
| varistor | | | | | | |
| Rated voltage | UC 24 V | 700324 | LV-S6-0324 AC/DC 24 V | 10 | | |
| | UC 230 V | 700326 | LV-S6-0326 AC/DC 230 V | 10 | | |
| RC module | | | | | | |
| Rated voltage | AC 48 V | 700322 | LRC-S6-0322 AC 24-48 V | 10 | | |
| | AC 230 V | 700321 | LRC-S6-0321 AC 115-230 V | 10 | | |
| | AC 400 V | 701321 | LRC-S6-1321 AC 400 V | 10 | | |
| Technical data | | | | | | |
| | 700323 | 700324 | 700326 | 700322 | 700321 | 701321 |
| Function type | Suppressor for Switch Gear | | | | | |
| Protection device | Diode | | varistor | | RC module | |
| Rated voltage | DC 230 V | UC 24 V | UC 230 V | AC 48 V | AC 230 V | AC 400 V |
| Shut-off points | ≤1 V | ≤52 V | ≤475 V | - | | |
| Rated frequency | - | | | 50-60 Hz | | |
| Inverse voltage/switching current | 1600 V / 1 A | | | - | | |
| Holding Capacity | - | | 200 VA | 10 VA | | |
| Type of connecting lead | LIY 0.5 mm ² , black | | | | | |
| Length of connecting lead (M) | 0,15 | | | | | |
| Termination | Fork-type cable lug M4 | | | | | |
| General | | | | | | |
| Design | S6 | | | | | |
| Pottant | 2-components | | | | | |
| Housing material | PA | | | | | |
| IP rating | IP 67 | | | | | |
| Field installation | attachable instead of the identification plate | | | | | |
| Operation temperature range | -20 °C – 60 °C | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Dimensions (w x h x d) | 32.5 x 27.0 x 11.5 mm | | | | | |
| Weight (kg/piece) | 0.010 | | 0.012 | | 0.010 | |
| Standards | - | | | | | |
| Approvals | - | | | VDE, UL, | | - |
| | | | | CSA | | |

Suppression Technology - Suppressor for Switch Gear

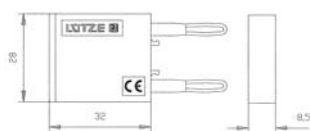
Universal suppressor module - switch size S00 - for Siemens switches

3RT1015-xxx / 3RT1016-xxx / 3RT1017-xxx / 3RH1122-xxx / 3RH1131-xxx / 3RH1140-xxx

Protection device: Diode / Varistor / RC module

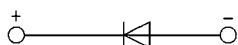


Dimensions

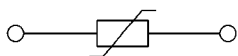


PIN assignment

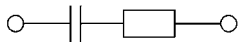
700952



700950, 700960, 700951



700959



| Description | Part-No. | Type | PU | | | |
|-----------------------------------|----------------------------|---------------|--------------------------|---------------|---------------|---------------|
| Diode | | | | | | |
| Rated voltage | DC 230 V | 700952 | LD-S11-0952 DC 12-250 V | 10 | | |
| varistor | | | | | | |
| Rated voltage | UC 24 V | 700950 | LV-S11-0950 AC/DC 24 V | 10 | | |
| | UC 115 V | 700960 | LV-S11-0960 AC/DC 115 V | 10 | | |
| | UC 230 V | 700951 | LV-S11-0951 AC/DC 230 V | 10 | | |
| RC module | | | | | | |
| Rated voltage | UC 230 V | 700959 | LRC-S11-0959 AC/DC 230 V | 10 | | |
| Technical data | | 700952 | 700950 | 700960 | 700951 | 700959 |
| Function type | Suppressor for Switch Gear | | | | | |
| Protection device | Diode | | varistor | | RC module | |
| Rated voltage | DC 230 V | UC 24 V | UC 115 V | UC 230 V | | |
| Shut-off points | ≤1 V | ≤100 V | ≤250 V | ≤430 V | ≤475 V | |
| Rated frequency | - | | 50-60 Hz | | | |
| Inverse voltage/switching current | 4000 V / 0,2 5A | | - | | | |
| Holding Capacity | - | | 7 VA | | - | |
| Type of connecting lead | - | | | | | |
| Length of connecting lead (M) | - | | | | | |
| Termination | Plug contact | | | | | |
| General | | | | | | |
| Design | S11 | | | | | |
| Status indication | - | | | | | |
| Housing material | PA | | | | | |
| IP rating | IP 20 | | | | | |
| Field installation | attachable to switches | | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Dimensions (w x h x d) | 8.5 x 32.0 x 28.0 mm | | | | | |
| Weight (kg/piece) | 0.005 | | | | | |
| Standards | - | | | | | |
| Approvals | UL, CSA | | | | | |

Mounting diagram



Suppression Technology - Suppressor for Switch Gear

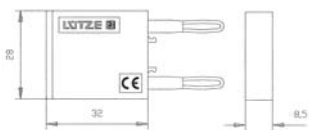
Universal suppressor module - switch size S00 - for Siemens switches

3RT1015-xxx / 3RT1016-xxx / 3RT1017-xxx / 3RH1122-xxx / 3RH1131-xxx / 3RH1140-xxx

Protection device: Diode + LED / Varistor + LED

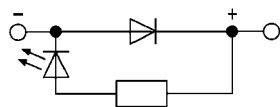


Dimensions

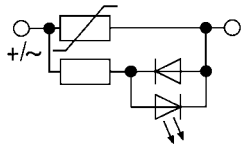


PIN assignment

700955



700953, 700954



| Description | Part-No. | Type | PU |
|-----------------------------------|----------------------------|----------------|-------------------------|
| Diode + LED | | | |
| Rated voltage | DC 24 V | 700955 | LD-S11-0955 DC 24 V |
| Varistor + LED | | | |
| Rated voltage | UC 24 V | 700953 | LV-S11-0953 AC/DC 24 V |
| | UC 230 V | 700954 | LV-S11-0954 AC/DC 230 V |
| Technical data | | | |
| | 700955 | 700953 | 700954 |
| Function type | Suppressor for Switch Gear | | |
| Protection device | Diode + LED | Varistor + LED | |
| Rated voltage | DC 24 V | UC 24 V | UC 230 V |
| Shut-off points | ≤1 V | ≤100 V | ≤475 V |
| Rated frequency | - | | 50-60 Hz |
| Inverse voltage/switching current | 4000 V / 0,25 A | | - |
| Holding Capacity | - | | 7 VA |
| Type of connecting lead | - | | |
| Length of connecting lead (M) | - M | | |
| Termination | Plug contact | | |
| General | | | |
| Design | S11 | | |
| Status indication | LED yellow | | |
| Housing material | PA | | |
| IP rating | IP 20 | | |
| Field installation | attachable to switches | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Dimensions (w x h x d) | 8.5 x 32.0 x 28.0 mm | | |
| Weight (kg/piece) | 0.005 | | |
| Standards | - | | |
| Approvals | UL, CSA | | |

Mounting diagram



Suppression Technology - Suppressor for Switch Gear

Universal suppressor module for Siemens switches 3RT102 (S0), 3RT103 (S2), 3RT 104 (S3)

Enclosure type: S12, S13

Protection device: Varistor / RC module

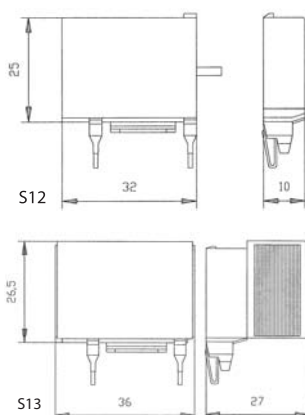


S12



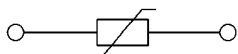
S13

Dimensions

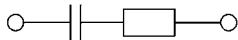


PIN assignment

700956, 700962



700957, 700958



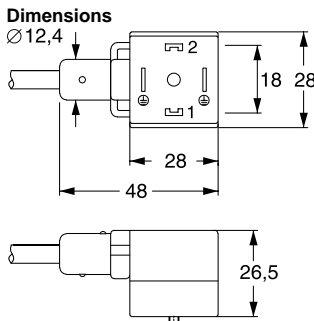
| Description | Part-No. | Type | PU |
|-----------------------------------|----------------------------|-----------------------|--------------------------|
| Varistor, S12 | | | |
| Rated voltage | UC 24 V | 700956 | LV-S12-0956 AC/DC 24 V |
| | UC 115 V | 700962 | LV-S12-0962 AC/DC 115 V |
| RC module, S12 | | | |
| Rated voltage | UC 230 V | 700957 | LRC-S12-0957 AC/DC 230 V |
| RC module, S13 | | | |
| Rated voltage | UC 230 V | 700958 | LRC-S13-0958 AC/DC 230 V |
| Technical data | | | |
| | 700956 | 700962 | 700957 |
| Function type | Suppressor for Switch Gear | | |
| Protection device | varistor | RC module, S12 | RC module, S13 |
| Rated voltage | UC 24 V | UC 115 V | UC 230 V |
| Shut-off points | ≤100 V | ≤250 V | ≤475 V |
| Rated frequency | 50–60 Hz | | |
| Inverse voltage/switching current | – | | |
| Holding Capacity | 30 VA | | |
| Type of connecting lead | – | | |
| Length of connecting lead (M) | – M | | |
| Termination | Plug contact | | |
| General | | | |
| Design | S12 | | S13 |
| Status indication | – | | |
| Housing material | PA | | |
| IP rating | IP 20 | | |
| Field installation | plug-in | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Dimensions (w x h x d) | 32.0 x 25.0 x 10.0 mm | 36.0 x 26.5 x 27.0 mm | |
| Weight (kg/piece) | 0.010 | 0.027 | |
| Standards | – | | |
| Approvals | UL, CSA | | |

Mounting diagram



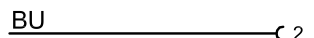
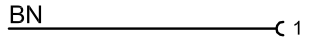
Suppression Technology - Suppressors for valves

Design A (18 mm) PVC termination cable with bridged ground conductor (PE)

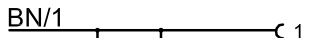


PIN assignment

709600, 709601, 709608



709602, 709603, 709604, 709673,
709674, 709675



709605, 709606, 709607, 709519



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|------------------------------|----|
| without component parts | | | | |
| Rated voltage | AC/DC 0-230 V | 709600 | L-A-9600 2,5mPVC up to 230 V | 10 |
| | AC/DC 0-230 V | 709601 | L-A-9601 5mPVC up to 230 V | 10 |
| | AC/DC 0-230 V | 709608 | L-A-9608 10,0m PVC 0-230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709602 | LV-A-9602 2,5mPVC AC/DC 24 V | 10 |
| | AC/DC 24 V | 709603 | LV-A-9603 5mPVC AC/DC 24 V | 10 |
| | AC/DC 24 V | 709604 | LV-A-9604 10mPVC AC/DC 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 230 V | 709673 | LV-A-9673 2,5m PVC 230 V | 10 |
| | AC/DC 230 V | 709674 | LV-A-9674 5,0m PVC 230 V | 10 |
| | AC/DC 230 V | 709675 | LV-A-9675 10,0m PVC 230 V | 10 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709605 | LS-A-9605 2,5m PVC 24 V | 10 |
| | AC/DC 24 V | 709606 | LS-A-9606 5,0m PVC 24 V | 10 |
| | AC/DC 24 V | 709607 | LS-A-9607 10,0m PVC 24 V | 10 |
| | AC/DC 24 V | 709519 | LS-A-9519 15,0m PVC 24 V | 10 |

| Technical data | without component parts | | | varistor | | | Suppressor diode | | | | | | |
|-------------------------------|---|------|------|------------|------|------|-------------------------------|------|------|------------|------|------|------|
| Function type | Suppressors for valves | | | | | | | | | | | | |
| Protection device | - | | | varistor | | | Suppressor diode | | | | | | |
| Rated voltage | AC/DC 0-230 V | | | AC/DC 24 V | | | AC/DC 230 V | | | AC/DC 24 V | | | |
| Current consumption per LED | - | | | 3 mA | | | 4 mA | | | - | | | |
| Shut-off points | - | | | ≤52 V | | | ≤475 V | | | ≤52 V | | | |
| Rated frequency | - | | | 50-60 Hz | | | - | | | - | | | |
| Holding Capacity | - | | | ≤100VA | | | - | | | - | | | |
| Type of connecting lead | PVC black / PVC 3 x 0.5 mm ² | | | | | | | | | | | | |
| Length of connecting lead (M) | 2,5 | 5 | 10 | 2,5 | 5 | 10 | 2,5 | 5 | 10 | 2,5 | 5 | 10 | 15 |
| Connecting lead | Diameter: 5.0 ± 0.15mm | | | | | | | | | | | | |
| General | | | | | | | | | | | | | |
| Design | Design A, contact clearance 18 mm | | | | | | | | | | | | |
| Status indication | - | | | LED yellow | | | - | | | - | | | |
| Coil Current max. | ≤7 A | | | ≤4 A | | | ≤0.5 A | | | ≤4 A | | | |
| Conductor labelling | colour-coded conductors | | | | | | | | | | | | |
| Housing material | TPU black ¹⁾ | | | | | | TPU transparent ¹⁾ | | | | | | |
| IP rating | IP 67 | | | | | | | | | | | | |
| Field installation | Breakaway torque 0.4 Nm | | | | | | | | | | | | |
| Termination | - | | | | | | | | | | | | |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C– 80°C, moving -5°C – 70°C | | | | | | | | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | | | | | | | | |
| Dimensions (w x h x d) | 28.0 x 26.5 x 48.0 mm | | | | | | | | | | | | |
| Weight (kg/piece) | 0.13 | 0.22 | 0.53 | 0.13 | 0.22 | 0.53 | 0.14 | 0.22 | 0.53 | 0.14 | 0.22 | 0.53 | 0.74 |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | | | | | | | | | | |
| Approvals | - | | | | | | | | | | | | |

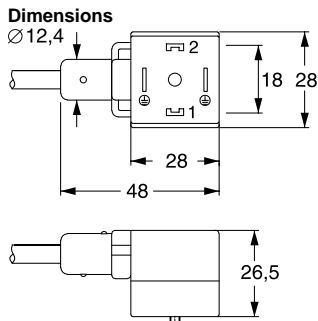
| Accessories | Colour | Article number | Type | Pkg. units |
|--------------------------|-------------|----------------|--------------|------------|
| Plate 7x20mm | white | 760968 | LG 6-0967 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braiding | | 270011 | CF 13 S | 50 |
| -PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Marker sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

¹⁾ Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

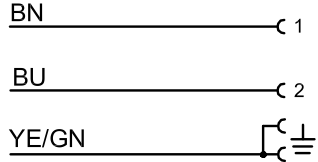
Suppression Technology - Suppressors for valves

Design A (18 mm) PUR termination cable with bridged ground conductor (PE)

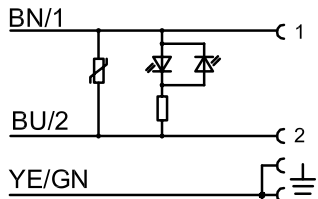


PIN assignment

709700, 709701, 709708



709773, 709774, 709775



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|------------------------------|----|
| without component parts | | | | |
| Rated voltage | AC/DC 0-230 V | 709700 | L-A-9700 2,5mPUR up to 230 V | 10 |
| | AC/DC 0-230 V | 709701 | L-A-9701 5mPUR up to 230 V | 10 |
| | AC/DC 0-230 V | 709708 | L-A-9708 10,0m PUR 0-230 V | 10 |

| varistor | | | | |
|-----------------|-------------|--------|---------------------------|----|
| Rated voltage | AC/DC 230 V | 709773 | LV-A-9773 2,5m PUR 230 V | 10 |
| | AC/DC 230 V | 709774 | LV-A-9774 5,0m PUR 230 V | 10 |
| | AC/DC 230 V | 709775 | LV-A-9775 10,0m PUR 230 V | 10 |

| Technical data | without component parts | varistor | | | | |
|-------------------------------|---|----------------|----|-----|---|----|
| Function type | Suppressors for valves | | | | | |
| Protection device | - | Varistor + LED | | | | |
| Rated voltage | AC/DC 0-230 V | AC/DC 230 V | | | | |
| Current consumption per LED | - | 3 mA | | | | |
| Shut-off points | - | ≤475 V | | | | |
| Rated frequency | 50-60 Hz | | | | | |
| Holding Capacity | - | ≤ 100VA | | | | |
| Type of connecting lead | PUR black / PVC 3 x 0.5 mm ² | | | | | |
| Length of connecting lead (M) | 2,5 | 5 | 10 | 2,5 | 5 | 10 |
| Connecting lead | Diameter: 5.6 ± 0.15mm | | | | | |

| General | | | | | | |
|-----------------------------|---|-------------------------------|------|------|------|------|
| Design | Design A, contact clearance 18 mm | | | | | |
| Status indication | - | LED yellow | | | | |
| Coil Current max. | ≤7 A | ≤0.5 A | | | | |
| Conductor labelling | colour-coded conductors | | | | | |
| Housing material | TPU black ¹⁾ | TPU transparent ¹⁾ | | | | |
| IP rating | IP 67 | | | | | |
| Field installation | Breakaway torque 0.4 Nm | | | | | |
| Termination | - | | | | | |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C– 90°C, moving -5°C – 80°C | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Dimensions (w x h x d) | 28.0 x 26.5 x 48.0 mm | | | | | |
| Weight (kg/piece) | 0.13 | 0.23 | 0.53 | 0.13 | 0.23 | 0.53 |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | | | |
| Approvals | - | | | | | |

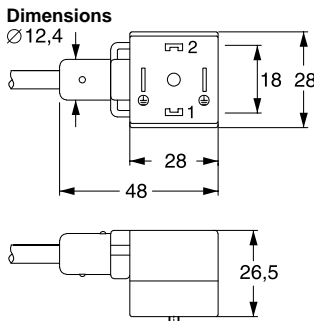
| Accessories | Colour | Article number | Type | Pkg. units |
|--------------------------|-------------|----------------|--------------|------------|
| Plate 7x20mm | white | 760968 | LG 6-0967 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braiding | | 270011 | CF 13 S | 50 |
| -PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Marker sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

¹⁾ Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

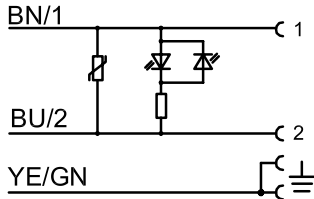
Suppression Technology - Suppressors for valves

Design A (18 mm) PUR termination cable with bridged ground conductor (PE)

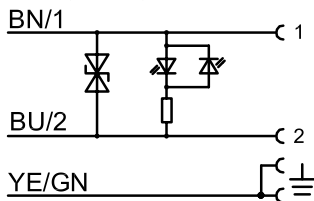


PIN assignment

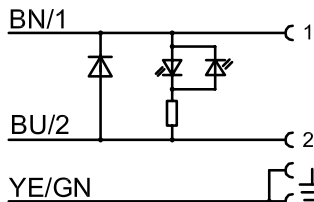
709702, 709703, 709704



709705, 709706, 709707



709526, 709527



| Description | Part-No. | Type | PU | |
|-------------------------|------------|--------|------------------------------|----|
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709702 | LV-A-9702 2,5mPUR AC/DC 24 V | 10 |
| | AC/DC 24 V | 709703 | LV-A-9703 5mPUR AC/DC 24 V | 10 |
| | AC/DC 24 V | 709704 | LV-A-9704 10mPUR AC/DC 24 V | 10 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709705 | LS-A-9705 2,5m PUR 24 V | 10 |
| | AC/DC 24 V | 709706 | LS-A-9706 5,0m PUR 24 V | 10 |
| | AC/DC 24 V | 709707 | LS-A-9707 10,0m PUR 24 V | 10 |
| Diode | | | | |
| Rated voltage | DC 24 V | 709526 | LD-A-9526 2,0m PUR 24 V | 10 |
| | DC 24 V | 709527 | LD-A-9527 5,0m PUR 24 V | 10 |

| Technical data | varistor | | | Suppressor diode | | | Diode | |
|-------------------------------|---|---|----|------------------------|---|----|-------------|---|
| Function type | Suppressors for valves | | | | | | | |
| Protection device | Varistor + LED | | | Suppressor diode + LED | | | Diode + LED | |
| Rated voltage | AC/DC 24 V | | | AC/DC 24 V | | | DC 24 V | |
| Current consumption per LED | 3 mA | | | 4 mA | | | | |
| Shut-off points | ≤475 V | | | ≤52 V | | | ≤1 V | |
| Rated frequency | | | | 50–60 Hz | | | – | |
| Holding Capacity | | | | ≤ 100VA | | | – | |
| Type of connecting lead | PUR black / PVC 3 x 0.5 mm ² | | | | | | | |
| Length of connecting lead (M) | 2,5 | 5 | 10 | 2,5 | 5 | 10 | 2,5 | 5 |
| Connecting lead | Diameter: 5.6 ± 0.15mm | | | | | | | |

| General | | | | | | | | |
|-----------------------------|--|------|------|------|------|------|------|------|
| Design | Design A, contact clearance 18 mm | | | | | | | |
| Status indication | LED yellow | | | | | | | |
| Coil Current max. | ≤0.5 A | | | | | | ≤4 A | |
| Conductor labelling | colour-coded conductors | | | | | | | |
| Housing material | TPU transparent ¹⁾ | | | | | | | |
| IP rating | IP 67 | | | | | | | |
| Field installation | Breakaway torque 0.4 Nm | | | | | | | |
| Termination | – | | | | | | | |
| Operation temperature range | Connector: -25°C – +90°C, cable: fixed -30°C– +90°C, moving -5°C – +80°C | | | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | | | |
| Dimensions (w x h x d) | 28.0 x 48.0 mm | | | | | | | |
| Weight (kg/piece) | 0.13 | 0.23 | 0.53 | 0.13 | 0.23 | 0.53 | 0.13 | 0.23 |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | | | | | |
| Approvals | – | | | | | | | |

| Accessories | Colour | Article number | Type | Pkg. units |
|--------------------------|-------------|----------------|--------------|------------|
| Plate 7x20mm | white | 760968 | LG 6-0967 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braiding | | 270011 | CF 13 S | 50 |
| -PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Marker sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

¹⁾ Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

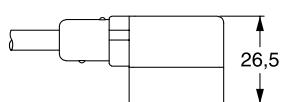
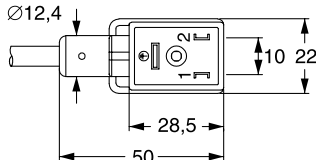
Design B (10 mm)

PVC termination cable

Ground wire terminator (PE) at the cable entry point= 0°



Dimensions

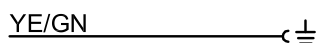
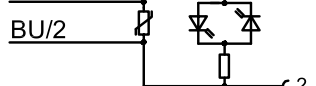
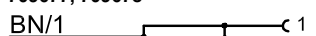


PIN assignment

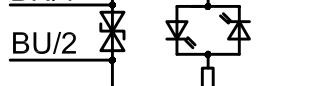
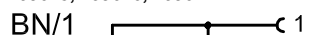
709610, 709611



709612, 709613, 709614, 709676,
709677, 709678



709615, 709616, 709617



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|----------------------------------|-----|
| without component parts | | | | |
| Rated voltage | AC/DC 0-230 V | 709610 | L-B-9610 2,5mPVC 0° up to 230 V | 10 |
| | AC/DC 0-230 V | 709611 | L-B-9611 5mPVC 0° up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709612 | LV-B-9612 2,5mPVC 0° up to 24 V | 10 |
| | AC/DC 24 V | 709613 | LV-B-9613 5mPVC 0° up to 24 V | 10 |
| | AC/DC 24 V | 709614 | LV-B-9614 10mPVC 0° 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 230 V | 709676 | LV-B-9676 2,5mPVC 0° up to 230 V | 100 |
| | AC/DC 230 V | 709677 | LV-B-9677 5mPVC 0° up to 230 V | 100 |
| | AC/DC 230 V | 709678 | LV-B-9678 10mPVC 0° up to 230 V | 100 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709615 | LS-B-9615 2,5m PVC 0° 24 V | 10 |
| | AC/DC 24 V | 709616 | LS-B-9616 5,0m PVC 0° 24 V | 10 |
| | AC/DC 24 V | 709617 | LS-B-9617 10,0m PVC 0° 24 V | 10 |

| Technical data | without component parts | varistor | Suppressor diode | |
|-------------------------------|-------------------------|---|------------------|------------|
| Function type | | Suppressors for valves | | |
| Protection device | | varistor | Suppressor diode | |
| Rated voltage | AC/DC 0-230 V | AC/DC 24 V | AC/DC 230 V | AC/DC 24 V |
| Current consumption per LED | - | 3 mA | 4 mA | |
| Shut-off points | - | ≤52 V | ≤475 V | ≤52 V |
| Rated frequency | | 50-60 Hz | | |
| Holding Capacity | - | ≤ 100VA | | |
| Type of connecting lead | | PVC black / PVC 3 x 0.5 mm ² | | |
| Length of connecting lead (M) | 2,5 5 2,5 5 | 10 2,5 5 10 | 2,5 5 10 | |
| Connecting lead | | Diameter: 5.0 ± 0.15mm | | |

General

| | | | | |
|-----------------------------|---|-------------------------------|----------------|------|
| Design | design B, contact clearance 10 mm | | | |
| Status indication | - | LED yellow | | |
| Coil Current max. | ≤7 A | ≤4 A | ≤0.5 A | ≤4 A |
| Conductor labelling | colour-coded conductors | | | |
| Housing material | TPU black ¹⁾ | TPU transparent ¹⁾ | | |
| IP rating | IP 67 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Termination | - | | | |
| Operation temperature range | Connector: -25°C - 90°C, cable: fixed -30°C- 80°C, moving -5°C - 70°C | | | |
| Storage temperature range | -40 °C - 90 °C | | | |
| Dimensions (w x h x d) | 22.0 x 26.5 x 50.0 mm | | | |
| Weight (kg/piece) | 0.13 0.22 0.13 0.22 | 0.53 0.13 0.22 0.53 | 0.13 0.22 0.53 | |
| Standards | EN 175301-803 (DIN 43 650), ISO 6952 | | | |

Approvals

| Accessories | Colour | Article number | Type | Pkg. units |
|--------------------------|-------------|----------------|--------------|------------|
| Plate 4x11mm | white | 681313 | BZT 0411 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

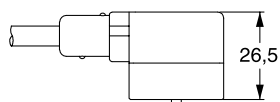
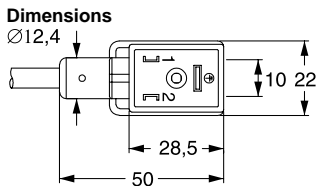
1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

Design B (10 mm)

PVC termination cable

Ground wire terminator (PE) across from the cable entry point= 180°

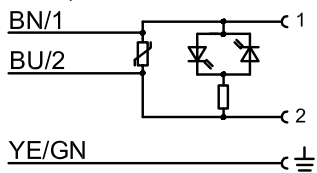


PIN assignment

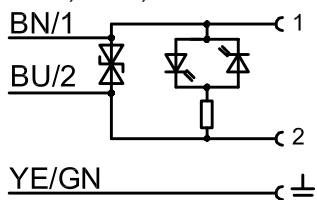
709620, 709621



709622, 709623, 709624, 709679,
709680, 709681



709625, 709626, 709627



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|-----------------------------------|-----|
| without component parts | | | | |
| Rated voltage | AC/DC 0–230 V | 709620 | L-B-9620 2,5mPVC 180° up to 230 V | 10 |
| | AC/DC 0–230 V | 709621 | L-B-9621 5mPVC 180° up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709622 | LV-B-9622 2,5mPVC 180° 24 V | 10 |
| | AC/DC 24 V | 709623 | LV-B-9623 5mPVC 180° 24 V | 10 |
| | AC/DC 24 V | 709624 | LV-B-9624 10mPVC 180° 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 230 V | 709679 | LV-B-9679 2,5m PVC 180° 230 V | 100 |
| | AC/DC 230 V | 709680 | LV-B-9680 5,0m PVC 180° 230 V | 100 |
| | AC/DC 230 V | 709681 | LV-B-9681 10,0m PVC 180° 230 V | 100 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709625 | LS-B-9625 2,5m PVC 180° 24 V | 10 |
| | AC/DC 24 V | 709626 | LS-B-9626 5,0m PVC 180° 24 V | 10 |
| | AC/DC 24 V | 709627 | LS-B-9627 10,0m PVC 180° 24 V | 10 |

| Technical data | without component parts | varistor | | | | Suppressor diode | | |
|-------------------------------|-------------------------|---|---------------------|-------------------|----------------|------------------|--|--|
| Function type | | Suppressors for valves | | | | | | |
| Protection device | without | varistor | | | | Suppressor diode | | |
| Rated voltage | AC/DC 0–230 V | AC/DC 24 V | AC/DC 230 V | | AC/DC 24 V | | | |
| Current consumption per LED | – | 3 mA | | | | 4 mA | | |
| Shut-off points | – | ≤52 V | ≤475 V | | ≤52 V | | | |
| Rated frequency | | 50–60 Hz | | | | | | |
| Holding Capacity | – | ≤ 100VA | | | | | | |
| Type of connecting lead | | PVC black / PVC 3 x 0.5 mm ² | | | | | | |
| Length of connecting lead (M) | 2,5 5 2,5 5 | 10 2,5 5 10 | 2,5 5 10 | 2,5 5 10 | | | | |
| Connecting lead | | Diameter: 5.0 ± 0.15mm | | | | | | |
| General | | | | | | | | |
| Design | | design B, contact clearance 10 mm | | | | | | |
| Status indication | – | LED yellow | | | | | | |
| Coil Current max. | ≤7 A | ≤4 A | ≤0.5 A | | ≤4 A | | | |
| Conductor labelling | | colour-coded conductors | | | | | | |
| Housing material | TPU black ¹⁾ | TPU transparent ¹⁾ | | | | | | |
| IP rating | | IP 67 | | | | | | |
| Field installation | | Breakaway torque 0.4 Nm | | | | | | |
| Termination | | – | | | | | | |
| Operation temperature range | | -40°C – +70°C (+85°C 10 min) | | | | | | |
| Storage temperature range | | -40 °C – 90 °C | | | | | | |
| Dimensions (w x h x d) | | 22.0 x 26.5 x 50.0 mm | | | | | | |
| Weight (kg/piece) | | 0.13 0.22 0.13 0.22 | 0.53 0.13 0.22 0.53 | 0.13 0.22 0.53 | 0.13 0.22 0.53 | | | |
| Standards | | EN 175301-803 (DIN 43 650), ISO 6952 | | | | | | |
| Approvals | | – | | | | | | |
| Accessories | Colour | Article number | Type | Pkg. units | | | | |
| Plate 4x11mm | white | 681313 | BZT 0411 | 100 | | | | |
| Protective pipes: | | | | | | | | |
| -PA | black | 271142 | CX 12 PA | 50 | | | | |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 | | | | |
| -PVC with steel braid | | 270011 | CF 13 S | 50 | | | | |
| PUR with coil | | 270411 | CF PUR 12 EL | 22 | | | | |
| Designation sleeve | transparent | 499995 | | 500 | | | | |
| Plate 4x23mm for 499995 | | 499988 | | 200 | | | | |

Comments

1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

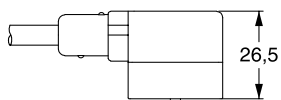
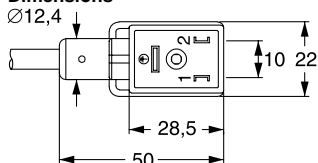
Design B (10 mm)

PUR termination cable

Ground wire terminator (PE) at the cable entry point= 0°



Dimensions

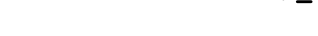
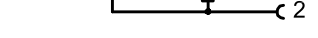
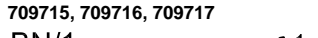
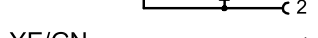


PIN assignment

709710, 709711



709712, 709713, 709714, 709776,
709777, 709778



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|----------------------------------|-----|
| without component parts | | | | |
| Rated voltage | AC/DC 0-230 V | 709710 | L-B-9710 2,5mPUR 0° up to 230 V | 10 |
| | AC/DC 0-230 V | 709711 | L-B-9711 5mPUR 0° up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709712 | LV-B-9712 2,5mPUR 0° 24V | 10 |
| | AC/DC 24 V | 709713 | LV-B-9713 5mPUR 0° 24V | 10 |
| | AC/DC 24 V | 709714 | LV-B-9714 10mPUR 0° 24V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 230 V | 709776 | LV-B-9776 2,5mPUR 0° up to 230 V | 100 |
| | AC/DC 230 V | 709777 | LV-B-9777 5mPUR 0° up to 230 V | 100 |
| | AC/DC 230 V | 709778 | LV-B-9778 10mPUR 0° up to 230 V | 100 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709715 | LS-B-9715 2,5m PUR 0° 24 V | 10 |
| | AC/DC 24 V | 709716 | LS-B-9716 5,0m PUR 0° 24 V | 10 |
| | AC/DC 24 V | 709717 | LS-B-9717 10,0m PUR 0° 24 V | 10 |

| Technical data | without component parts | varistor | Suppressor diode | |
|-------------------------------|-------------------------|---|------------------|------------|
| Function type | | Suppressors for valves | | |
| Protection device | | varistor | Suppressor diode | |
| Rated voltage | AC/DC 0-230 V | AC/DC 24 V | AC/DC 230 V | AC/DC 24 V |
| Current consumption per LED | - | 3 mA | 4 mA | |
| Shut-off points | - | ≤52 V | ≤475 V | ≤52 V |
| Rated frequency | | 50-60 Hz | | |
| Holding Capacity | - | ≤ 100VA | | |
| Type of connecting lead | | PUR black / PVC 3 x 0.5 mm ² | | |
| Length of connecting lead (M) | 2,5 5 2,5 5 10 | 2,5 5 10 | 2,5 5 10 | |
| Connecting lead | | Diameter: 5.6 ± 0.15mm | | |

General

| | | | | |
|-----------------------------|---|-------------------------------|--------|------|
| Design | design B, contact clearance 10 mm | | | |
| Status indication | - | LED yellow | | |
| Coil Current max. | ≤7 A | ≤4 A | ≤0.5 A | ≤4 A |
| Conductor labelling | colour-coded conductors | | | |
| Housing material | TPU black ¹⁾ | TPU transparent ¹⁾ | | |
| IP rating | IP 67 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Termination | - | | | |
| Operation temperature range | Connector: -25°C - 90°C, cable: fixed -30°C- 90°C, moving -5°C - 80°C | | | |
| Storage temperature range | -40 °C - 90 °C | | | |
| Dimensions (w x h x d) | 22.0 x 26.5 x 50.0 mm | | | |
| Weight (kg/piece) | 0.13 0.22 0.13 0.22 0.53 0.13 0.22 0.53 0.13 0.22 0.53 | | | |
| Standards | EN 175301-803 (DIN 43 650), ISO 6952 | | | |

Approvals

| Accessories | Colour | Article number | Type | Pkg. units |
|--------------------------|-------------|----------------|--------------|------------|
| Plate 4x11mm | white | 681313 | BZT 0411 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

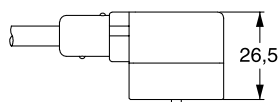
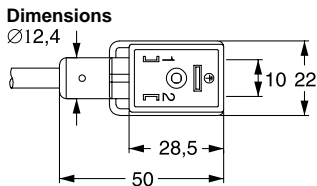
1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

Design B (10 mm)

PUR termination cable

Ground wire terminator (PE) across from the cable entry point= 180°

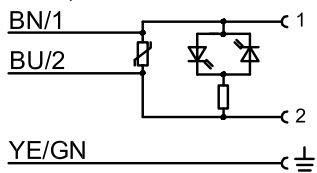


PIN assignment

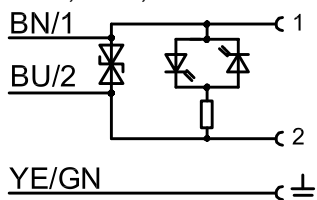
709720, 709721



709722, 709723, 709724, 709779,
709780, 709781



709725, 709726, 709727



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|-----------------------------------|-----|
| without component parts | | | | |
| Rated voltage | AC/DC 0–230 V | 709720 | L-B-9720 2,5mPUR 180° up to 230 V | 10 |
| | AC/DC 0–230 V | 709721 | L-B-9721 5mPUR 180° up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709722 | LV-B-9722 2,5mPUR 180° 24 V | 10 |
| | AC/DC 24 V | 709723 | LV-B-9723 5mPUR 180° 24 V | 10 |
| | AC/DC 24 V | 709724 | LV-B-9724 10mPUR 180° 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 230 V | 709779 | LV-B-9779 2,5m PUR 180°230 V | 100 |
| | AC/DC 230 V | 709780 | LV-B-9780 5,0m PUR 180°230 V | 100 |
| | AC/DC 230 V | 709781 | LV-B-9781 10,0m PUR 180°230 V | 100 |
| Suppressor diode | | | | |
| Rated voltage | AC 24 V | 709725 | LS-B-9725 2,5m PUR 180° 24 V | 10 |
| | AC 24 V | 709726 | LS-B-9726 5,0m PUR 180° 24 V | 10 |
| | AC 24 V | 709727 | LS-B-9727 10,0m PUR 180° 24 V | 10 |

| Technical data | without component parts | varistor | | | | Suppressor diode | | |
|-------------------------------|-------------------------|---|-------------|----------|---------|------------------|--|--|
| Function type | | Suppressors for valves | | | | | | |
| Protection device | without | varistor | | | | Suppressor diode | | |
| Rated voltage | AC/DC 0–230 V | AC/DC 24 V | AC/DC 230 V | | AC 24 V | | | |
| Current consumption per LED | – | 3 mA | | | | 4 mA | | |
| Shut-off points | – | ≤52 V | ≤475 V | | ≤52 V | | | |
| Rated frequency | | 50–60 Hz | | | | | | |
| Holding Capacity | – | ≤ 100VA | | | | | | |
| Type of connecting lead | | PUR black / PVC 3 x 0.5 mm ² | | | | | | |
| Length of connecting lead (M) | 2,5 5 2,5 5 | 10 2,5 5 10 | 2,5 5 10 | 2,5 5 10 | | | | |
| Connecting lead | | diameter: 5.6 ± 0.15 mm | | | | | | |

| General | |
|-----------------------------|---|
| Design | design B, contact clearance 10 mm |
| Status indication | – LED yellow |
| Coil Current max. | ≤7 A ≤4 A ≤0.5 A ≤4 A |
| Conductor labelling | colour-coded conductors |
| Housing material | TPU black ¹⁾ TPU transparent ¹⁾ |
| IP rating | IP 67 |
| Field installation | Breakaway torque 0.4 Nm |
| Termination | – |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C– 90°C, moving -5°C – 80°C |
| Storage temperature range | -40 °C – 90 °C |
| Dimensions (w x h x d) | 22.0 x 26.5 x 50.0 mm |
| Weight (kg/piece) | 0.13 0.22 0.13 0.22 0.53 0.13 0.22 0.53 0.13 0.22 0.53 |
| Standards | EN 175301-803 (DIN 43 650), ISO 6952 |

| Approvals | – | | | |
|--------------------------|-------------|----------------|--------------|------------|
| Accessories | Colour | Article number | Type | Pkg. units |
| Plate 4x11mm | white | 681313 | BZT 0411 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

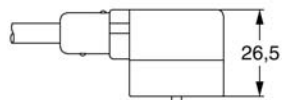
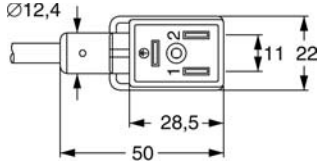
Design BI (11 mm)

PVC termination cable

Ground wire terminator (PE) at the cable entry point= 0°



Dimensions

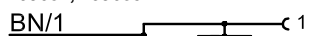


PIN assignment

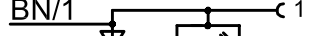
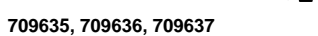
709630, 709631



709632, 709633, 709634, 709683,
709684, 709685



709635, 709636, 709637



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|----------------------------------|-----|
| without component parts | | | | |
| Rated voltage | AC/DC 0-230 V | 709630 | L-BI-9630 2,5mPVC 0° up to 230 V | 10 |
| | AC/DC 0-230 V | 709631 | L-BI-9631 5mPVC 0° up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709632 | LV-BI-9632 2,5mPVC 0° 24 V | 10 |
| | AC/DC 24 V | 709633 | LV-BI-9633 5mPVC 0° 24 V | 10 |
| | AC/DC 24 V | 709634 | LV-BI-9634 10mPVC 0° 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 230 V | 709683 | LV-BI-9683 2,5m PVC 0° 230 V | 100 |
| | AC/DC 230 V | 709684 | LV-BI-9684 5,0m PVC 0° 230 V | 100 |
| | AC/DC 230 V | 709685 | LV-BI-9685 10,0m PVC 0° 230 V | 100 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709635 | LS-BI-9635 2,5m PVC 0° 24 V | 10 |
| | AC/DC 24 V | 709636 | LS-BI-9636 5,0m PVC 0° 24 V | 10 |
| | AC/DC 24 V | 709637 | LS-BI-9637 10,0m PVC 0° 24 V | 10 |

| Technical data | without component parts | varistor | Suppressor diode | | | | | |
|-------------------------------|---|------------|------------------|------------|----|-----|---|----|
| Function type | Suppressors for valves | | | | | | | |
| Protection device | without | varistor | Suppressor diode | | | | | |
| Rated voltage | AC/DC 0-230 V | AC/DC 24 V | AC/DC 230 V | AC/DC 24 V | | | | |
| Current consumption per LED | - | 3 mA | 4 mA | | | | | |
| Shut-off points | - | ≤52 V | ≤475 V | ≤52 V | | | | |
| Rated frequency | 50-60 Hz | | | | | | | |
| Holding Capacity | ≤ 100VA | | | | | | | |
| Type of connecting lead | PVC black / PVC 3 x 0.5 mm ² | | | | | | | |
| Length of connecting lead (M) | 2,5 | 5 | 2,5 | 5 | 10 | 2,5 | 5 | 10 |
| Connecting lead | Diameter: 5.0 ± 0.15 mm | | | | | | | |

| General | |
|-----------------------------|---|
| Design | Design B, contact clearance 11 mm (Industry) |
| Status indication | LED yellow |
| Coil Current max. | ≤7 A |
| Conductor labelling | ≤4 A |
| Housing material | TPU black ¹⁾ |
| IP rating | TPU transparent ¹⁾ |
| Field installation | IP 67 |
| Termination | Breakaway torque 0.4 Nm |
| Operation temperature range | Connector: -25°C - 90°C, cable: fixed -30°C- 80°C, moving -5°C - 70°C |
| Storage temperature range | -40 °C - 90 °C |
| Dimensions (w x h x d) | 22.0 x 26.5 x 50.0 mm |
| Weight (kg/piece) | 0.13 0.22 0.13 0.22 0.53 0.13 0.22 0.53 0.13 0.22 0.53 |
| Standards | - |
| Approvals | - |

| Accessories | Colour | Article number | Type | Pkg. units |
|-------------------------|-------------|----------------|--------------|------------|
| Plate 4x11mm | white | 681313 | BZT 0411 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments
1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

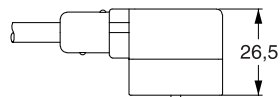
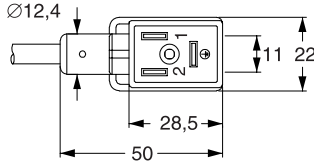
Design BI (11 mm)

PVC termination cable

Ground wire terminator (PE) across from the cable entry point= 180°

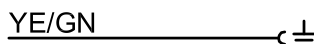


Dimensions

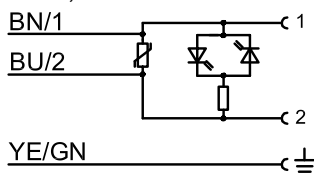


PIN assignment

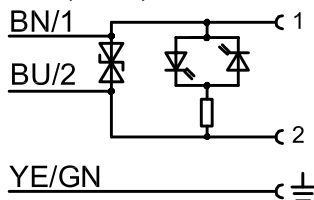
709640, 709641



709642, 709643, 709644, 709686,
709687, 709688



709645, 709646, 709647



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|------------------------------------|-----|
| without component parts | | | | |
| Rated voltage | AC/DC 0–230 V | 709640 | L-BI-9640 2,5mPVC 180° up to 230 V | 10 |
| | AC/DC 0–230 V | 709641 | L-BI-9641 5mPVC 180° up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709642 | LV-BI-9642 2,5mPVC 180° 24 V | 10 |
| | AC/DC 24 V | 709643 | LV-BI-9643 5mPVC 180° 24 V | 10 |
| | AC/DC 24 V | 709644 | LV-BI-9644 10mPVC 180° 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 230 V | 709686 | LV-B-9686 2,5mPVC 180° up to 230 V | 100 |
| | AC/DC 230 V | 709687 | LV-B-9687 5mPVC 180° up to 230 V | 100 |
| | AC/DC 230 V | 709688 | LV-B-9688 10mPVC 180° up to 230 V | 100 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709645 | LS-BI-9645 2,5m PVC 180° 24 V | 10 |
| | AC/DC 24 V | 709646 | LS-BI-9646 5,0m PVC 180° 24 V | 10 |
| | AC/DC 24 V | 709647 | LS-BI-9647 10,0m PVC 180° 24 V | 10 |

| Technical data | without component parts | varistor | Suppressor diode | |
|-------------------------------|-------------------------|---|------------------|------------|
| Function type | | Suppressors for valves | | |
| Protection device | without | varistor | Suppressor diode | |
| Rated voltage | AC/DC 0–230 V | AC/DC 24 V | AC/DC 230 V | AC/DC 24 V |
| Current consumption per LED | – | 3 mA | 4 mA | |
| Shut-off points | – | ≤52 V | ≤475 V | ≤52 V |
| Rated frequency | | 50–60 Hz | | |
| Holding Capacity | – | ≤ 100VA | | |
| Type of connecting lead | | PVC black / PVC 3 x 0.5 mm ² | | |
| Length of connecting lead (M) | 2,5 5 2,5 5 10 | 2,5 5 10 | 2,5 5 10 | |
| Connecting lead | | Diameter: 5.0 ± 0.15 mm | | |

| General | | | | |
|-----------------------------|---|-------------------------------|----------------|------|
| Design | Design B, contact clearance 11 mm (Industry) | | | |
| Status indication | LED yellow | | | |
| Coil Current max. | ≤7 A | ≤4 A | ≤0.5 A | ≤4 A |
| Conductor labelling | colour-coded conductors | | | |
| Housing material | TPU black ¹⁾ | TPU transparent ¹⁾ | | |
| IP rating | IP 67 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Termination | – | | | |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C– 80°C, moving -5°C – 70°C | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Dimensions (w x h x d) | 22.0 x 26.5 x 50.0 mm | | | |
| Weight (kg/piece) | 0.13 0.22 0.13 0.22 0.53 | 0.13 0.22 0.53 | 0.13 0.22 0.53 | |
| Standards | – | | | |
| Approvals | – | | | |

| Accessories | Colour | Article number | Type | Pkg. units |
|--------------------------|-------------|----------------|--------------|------------|
| Plate 4x11mm | white | 681313 | BZT 0411 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

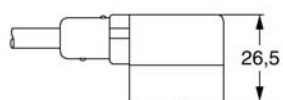
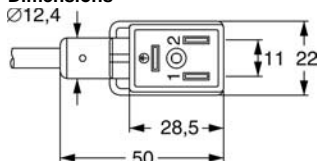
Design BI (11 mm)

PUR termination cable

Ground wire terminator (PE) at the cable entry point= 0°



Dimensions



PIN assignment

709730, 709731

BN/1 — c 1

BU/2 — c 2

YE/GN — c \perp

709732, 709733, 709734, 709783,
709784, 709785

BN/1 — c 1

BU/2 — c 2

YE/GN — c \perp

709735, 709736, 709737

BN/1 — c 1

BU/2 — c 2

YE/GN — c \perp

| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|----------------------------------|-----|
| without component parts | | | | |
| Rated voltage | AC/DC 0–230 V | 709730 | L-BI-9730 2,5mPUR 0° up to 230 V | 10 |
| | AC/DC 0–230 V | 709731 | L-BI-9731 5mPUR 0° up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709732 | LV-BI-9732 2,5mPUR 0° 24 V | 10 |
| | AC/DC 24 V | 709733 | LV-BI-9733 5mPUR 0° 24 V | 10 |
| | AC/DC 24 V | 709734 | LV-BI-9734 10mPUR 0° 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 230 V | 709783 | LV-BI-9783 2,5m PUR 0° 230 V | 100 |
| | AC/DC 230 V | 709784 | LV-BI-9784 5,0m PUR 0° 230 V | 100 |
| | AC/DC 230 V | 709785 | LV-BI-9785 10,0m PUR 0° 230 V | 100 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709735 | LS-BI-9735 2,5m PUR 0° 24 V | 10 |
| | AC/DC 24 V | 709736 | LS-BI-9736 5,0m PUR 0° 24 V | 10 |
| | AC/DC 24 V | 709737 | LS-BI-9737 10,0m PUR 0° 24 V | 10 |

| Technical data | without component parts | varistor | Suppressor diode |
|-------------------------------|---|------------|------------------|
| Function type | Suppressors for valves | | |
| Protection device | without | varistor | Suppressor diode |
| Rated voltage | AC/DC 0–230 V | AC/DC 24 V | AC/DC 230 V |
| Current consumption per LED | – | 3 mA | 4 mA |
| Shut-off points | – | ≥52 V | ≥475 V |
| Rated frequency | 50–60 Hz | | |
| Holding Capacity | – | ≤ 100VA | |
| Type of connecting lead | PUR black / PVC 3 x 0.5 mm ² | | |
| Length of connecting lead (M) | 2,5 | 5 | 2,5 |
| Connecting lead | diameter: 5.6 ± 0.15 mm | | |

| General | |
|-----------------------------|---|
| Design | Design B, contact clearance 11 mm (Industry) |
| Status indication | LED yellow |
| Coil Current max. | ≤7 A |
| Conductor labelling | ≤4 A |
| Housing material | TPU black ¹⁾ |
| IP rating | TPU transparent ¹⁾ |
| Field installation | IP 67 |
| Termination | Breakaway torque 0.4 Nm |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C– 90°C, moving -5°C – 80°C |
| Storage temperature range | -40 °C – 90 °C |
| Dimensions (w x h x d) | 22.0 x 26.5 x 50.0 mm |
| Weight (kg/piece) | 0.13 0.22 0.13 0.22 0.53 0.13 0.22 0.53 0.13 0.22 0.53 |
| Standards | – |
| Approvals | – |

| Accessories | Colour | Article number | Type | Pkg. units |
|-------------------------|-------------|----------------|--------------|------------|
| Plate 4x11mm | white | 681313 | BZT 0411 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

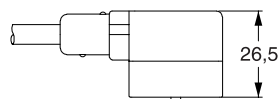
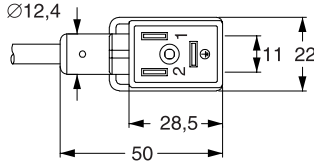
Design BI (11 mm)

PUR termination cable

Ground wire terminator (PE) across from the cable entry point= 180°



Dimensions

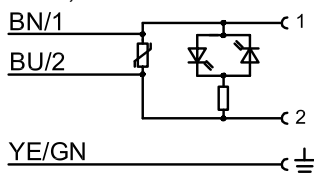


PIN assignment

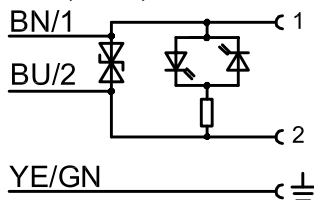
709740, 709741



709742, 709743, 709744, 709786,
709787, 709788



709745, 709746, 709747



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|------------------------------------|-----|
| without component parts | | | | |
| Rated voltage | AC/DC 0–230 V | 709740 | L-BI-9740 2,5mPUR 180° up to 230 V | 10 |
| | AC/DC 0–230 V | 709741 | L-BI-9741 5mPUR 180° up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709742 | LV-BI-9742 2,5mPUR 180° 24 V | 10 |
| | AC/DC 24 V | 709743 | LV-BI-9743 5mPUR 180° 24 V | 10 |
| | AC/DC 24 V | 709744 | LV-BI-9744 10mPUR 180° 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 230 V | 709786 | LV-B-9786 2,5mPUR 180° up to 230 V | 100 |
| | AC/DC 230 V | 709787 | LV-B-9787 5mPUR 180° up to 230 V | 100 |
| | AC/DC 230 V | 709788 | LV-B-9788 10mPUR 180° up to 230 V | 100 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709745 | LS-BI-9745 2,5m PUR 180° 24 V | 10 |
| | AC/DC 24 V | 709746 | LS-BI-9746 5,0m PUR 180° 24 V | 10 |
| | AC/DC 24 V | 709747 | LS-BI-9747 10,0m PUR 180° 24 V | 10 |

| Technical data | without component parts | varistor | | | Suppressor diode | | | |
|-------------------------------|---|------------------------|-------------|----------|------------------|-----|---|----|
| Function type | | Suppressors for valves | | | | | | |
| Protection device | without | varistor | | | Suppressor diode | | | |
| Rated voltage | AC/DC 0–230 V | AC/DC 24 V | AC/DC 230 V | | AC/DC 24 V | | | |
| Current consumption per LED | – | 3 mA | | | 4 mA | | | |
| Shut-off points | – | ≥52 V | ≥475 V | | ≥52 V | | | |
| Rated frequency | 50–60 Hz | 50/60 Hz | | 50–60 Hz | | | | |
| Holding Capacity | – | ≤ 100VA | | | | | | |
| Type of connecting lead | PUR black / PVC 3 x 0.5 mm ² | | | | | | | |
| Length of connecting lead (M) | 2,5 | 5 | 2,5 | 5 | 10 | 2,5 | 5 | 10 |
| Connecting lead | diameter: 5.6 ± 0.15 mm | | | | | | | |

| General | |
|-----------------------------|---|
| Design | Design B, contact clearance 11 mm (Industry) |
| Status indication | LED yellow |
| Coil Current max. | ≤7 A |
| | ≤4 A |
| | ≤0.5 A |
| Conductor labelling | colour-coded conductors |
| Housing material | TPU black ¹⁾ |
| | TPU transparent ¹⁾ |
| IP rating | IP 67 |
| Field installation | Breakaway torque 0.4 Nm |
| Termination | – |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C– 90°C, moving -5°C – 80°C |
| Storage temperature range | -40 °C – 90 °C |
| Dimensions (w x h x d) | 22.0 x 26.5 x 50.0 mm |
| Weight (kg/piece) | 0.13 0.22 0.13 0.22 0.53 0.13 0.22 0.53 0.13 0.22 0.53 |
| Standards | – |
| Approvals | – |

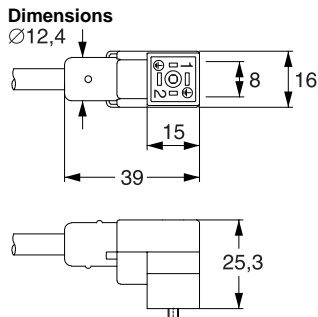
| Accessories | Colour | Article number | Type | Pkg. units |
|--------------------------|-------------|----------------|--------------|------------|
| Plate 4x11mm | white | 681313 | BZT 0411 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

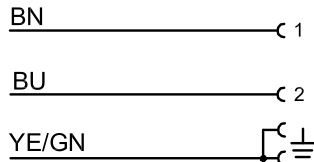
Suppression Technology - Suppressors for valves

Design C (8 mm) PVC termination cable with bridged ground conductor (PE)

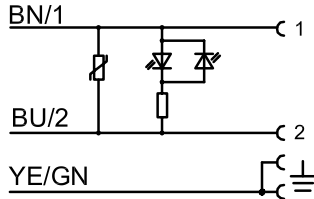


PIN assignment

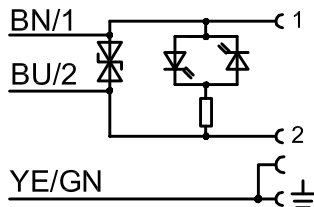
709650, 709651



709655, 709656, 709657



709653, 709654, 709659



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|------------------------------|----|
| without component parts | | | | |
| Rated voltage | AC/DC 0–230 V | 709650 | L-C-9650 2,5mPVC up to 230 V | 10 |
| | AC/DC 0–230 V | 709651 | L-C-9651 5mPVC up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709655 | LV-C-9655 2,5mPVC 24 V | 10 |
| | AC/DC 24 V | 709656 | LV-C-9656 5mPVC 24 V | 10 |
| | AC/DC 24 V | 709657 | LV-C-9657 10mPVC 24 V | 10 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709653 | LS-C-9653 2,5m PVC 24V | 10 |
| | AC/DC 24 V | 709654 | LS-C-9654 5,0m PVC 24V | 10 |
| | AC/DC 24 V | 709659 | LS-C-9659 10,0m PVC 24V | 10 |

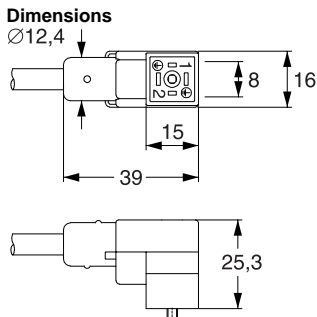
| Technical data | without component parts | | varistor | | Suppressor diode | | | | |
|-------------------------------|--|----------------|-------------------------------|--------------|------------------|------------|------|------|--|
| Function type | Suppressors for valves | | | | | | | | |
| Protection device | – | | varistor | | Suppressor diode | | | | |
| Rated voltage | AC/DC 0–230 V | | AC/DC 24 V | | | | | | |
| Current consumption per LED | – | | 3 mA | | 4 mA | | | | |
| Shut-off points | – | | ≤52 V | | | | | | |
| Rated frequency | 50–60 Hz | | | | | | | | |
| Holding Capacity | – | | ≤ 70VA | | | | | | |
| Type of connecting lead | PVC black / PVC 3 x 0.5 mm ² | | | | | | | | |
| Length of connecting lead (M) | 2,5 | 5 | 2,5 | 5 | 10 | 2,5 | 5 | 10 | |
| Connecting lead | Diameter: 5.0 ± 0.15 mm | | | | | | | | |
| General | | | | | | | | | |
| Design | Design C, contact clearance 8 mm | | | | | | | | |
| Status indication | – | | LED yellow | | | | | | |
| Coil Current max. | ≤7 A | | ≤3 A | | | | | | |
| Conductor labelling | colour-coded conductors | | | | | | | | |
| Housing material | TPU black ¹⁾ | | TPU transparent ¹⁾ | | | | | | |
| IP rating | IP 67 | | | | | | | | |
| Field installation | Breakaway torque 0.4 Nm | | | | | | | | |
| Termination | – | | | | | | | | |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C – 80°C, moving -5°C – 70°C | | | | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | | | | |
| Dimensions (w x h x d) | 16.0 x 25.3 x 39.0 mm | | | | | | | | |
| Weight (kg/piece) | 0.12 | 0.22 | 0.12 | 0.22 | 0.52 | 0.12 | 0.22 | 0.52 | |
| Standards | EN 175301-803 (DIN 43 650) ISO 6952 | | | | | | | | |
| Approvals | – | | | | | | | | |
| Accessories | | | | | | | | | |
| | Colour | Article number | | Type | | Pkg. units | | | |
| Plate 4x11mm | white | 681313 | | BZT 0411 | | 100 | | | |
| Protective pipes: | | | | | | | | | |
| -PA | black | 271142 | | CX 12 PA | | 50 | | | |
| -PVC with hard PVC coil | grey | 270401 | | CF 12 EL | | 30 | | | |
| -PVC with steel braid | | 270011 | | CF 13 S | | 50 | | | |
| PUR with coil | | 270411 | | CF PUR 12 EL | | 22 | | | |
| Designation sleeve | transparent | 499995 | | | | 500 | | | |
| Plate 4x23mm for 499995 | | 499988 | | | | 200 | | | |

Comments

1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

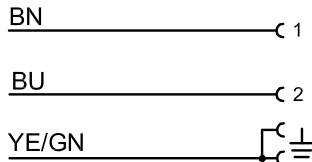
Suppression Technology - Suppressors for valves

Design C (8 mm) PUR termination cable with bridged ground conductor (PE)

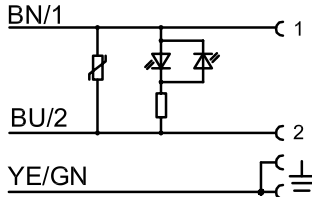


PIN assignment

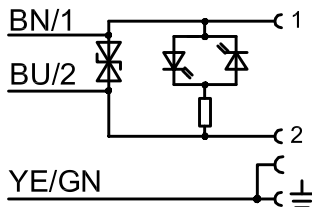
709750, 709751



709755, 709756, 709757



709753, 709754, 709759



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|------------------------------|----|
| without component parts | | | | |
| Rated voltage | AC/DC 0–230 V | 709750 | L-C-9750 2,5mPUR up to 230 V | 10 |
| | AC/DC 0–230 V | 709751 | L-C-9751 5mPUR up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709755 | LV-C 9755 2,5mPUR 24 V | 10 |
| | AC/DC 24 V | 709756 | LV-C 9756 5mPUR 24 V | 10 |
| | AC/DC 24 V | 709757 | LV-C 9757 10mPUR 24 V | 10 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709753 | LV-C-9753 2,5m PUR 24 V | 10 |
| | AC/DC 24 V | 709754 | LV-C-9754 5,0m PUR 24 V | 10 |
| | AC/DC 24 V | 709759 | LV-C-9759 10,0m PUR 24 V | 10 |

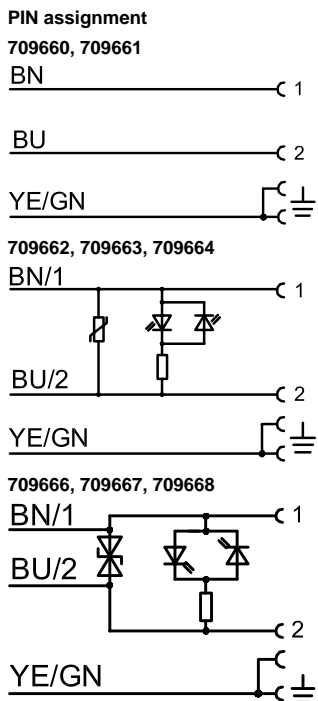
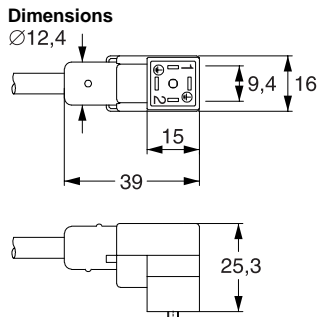
| Technical data | without component parts | varistor | Suppressor diode | |
|-------------------------------|---|-------------------------------|------------------|------------|
| Function type | Suppressors for valves | | | |
| Protection device | – | varistor | Suppressor diode | |
| Rated voltage | AC/DC 0–230 V | AC/DC 24 V | | |
| Current consumption per LED | – | 3 mA | 4 mA | |
| Shut-off points | – | ≤52 V | | |
| Rated frequency | – | 50–60 Hz | | |
| Holding Capacity | – | 70 VA | – | |
| Type of connecting lead | PUR black / PVC 3 x 0.5 mm ² | | | |
| Length of connecting lead (M) | 2,5 5 | 2,5 5 10 | 2,5 5 10 | |
| Connecting lead | diameter: 5.6 ± 0.15 mm | | | |
| General | | | | |
| Design | Design C, contact clearance 8 mm | | | |
| Status indication | – | LED yellow | | |
| Coil Current max. | ≤7 A | ≤3 A | | |
| Conductor labelling | colour-coded conductors | | | |
| Housing material | TPU black ¹⁾ | TPU transparent ¹⁾ | | |
| IP rating | IP 67 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Termination | – | | | |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C– 90°C, moving -5°C – 80°C | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Dimensions (w x h x d) | 16.0 x 25.3 x 39.0 mm | | | |
| Weight (kg/piece) | 0.12 0.22 | 0.12 0.22 0.52 | 0.12 0.22 0.52 | |
| Standards | EN 175301-803 (DIN 43 650) ISO 6952 | | | |
| Approvals | – | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Plate 4x11mm | white | 681313 | BZT 0411 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| PUR with coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

Comments

1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

Design CI (9.4 mm) PVC termination cable with bridged ground conductor (PE)



| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|-------------------------------|----|
| without component parts | | | | |
| Rated voltage | AC/DC 0–230 V | 709660 | L-CI-9660 2,5mPVC up to 230 V | 10 |
| | AC/DC 0–230 V | 709661 | L-CI-9661 5mPVC up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709662 | LV-CI 9662 2,5mPVC 24 V | 10 |
| | AC/DC 24 V | 709663 | LV-CI 9663 5mPVC 24 V | 10 |
| | AC/DC 24 V | 709664 | LV-CI 9664 10mPVC 24 V | 10 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709666 | LS-CI-9666 2,5m PVC 24 V | 10 |
| | AC/DC 24 V | 709667 | LS-CI-9667 5,0m PVC 24 V | 10 |
| | AC/DC 24 V | 709668 | LS-CI-9668 10,0m PVC 24 V | 10 |

| Technical data | without component parts | | varistor | | | Suppressor diode | | |
|-------------------------------|--|-----------------------|-------------------------------|------|--------------|------------------|-------------------|------|
| Function type | Suppressors for valves | | | | | | | |
| Protection device | – | | varistor | | | Suppressor diode | | |
| Rated voltage | AC/DC 0–230 V | | AC/DC 24 V | | | – | | |
| Current consumption per LED | – | | 3 mA | | | 4 mA | | |
| Shut-off points | – | | – | | | ≤52 V | | |
| Rated frequency | – | | 50–60 Hz | | | – | | |
| Holding Capacity | – | | – | | | ≤ 70VA | | |
| Type of connecting lead | PVC black / PVC 3 x 0.5 mm ² | | | | | | | |
| Length of connecting lead (M) | 2,5 | 5 | 2,5 | 5 | 10 | 2,5 | 5 | 10 |
| Connecting lead | Diameter: 5.0 ± 0.15 mm | | | | | | | |
| General | | | | | | | | |
| Design | Design CI, contact clearance 9.4 mm (industry) | | | | | | | |
| Status indication | – | | – | | | LED yellow | | |
| Coil Current max. | ≤7 A | | – | | | ≤3 A | | |
| Conductor labelling | – | | colour-coded conductors | | | – | | |
| Housing material | TPU black ¹⁾ | | TPU transparent ¹⁾ | | | – | | |
| IP rating | – | | IP 67 | | | – | | |
| Field installation | Breakaway torque 0.4 Nm | | | | | | | |
| Termination | – | | | | | | | |
| Operation temperature range | –40°C – +70°C (+85°C 10 min) | | | | | | | |
| Storage temperature range | –40 °C – 90 °C | | | | | | | |
| Dimensions (w x h x d) | 16.0 x 25.3 x 39.0 mm | | | | | | | |
| Weight (kg/piece) | 0.12 | 0.22 | 0.12 | 0.22 | 0.52 | 0.12 | 0.22 | 0.52 |
| Standards | – | | | | | | | |
| Approvals | – | | | | | | | |
| Accessories | | | | | | | | |
| | Colour | Article number | | | Type | | Pkg. units | |
| Plate 4x11mm | white | 681313 | | | BZT 0411 | | 100 | |
| Protective pipes: | | | | | | | | |
| -PA | black | 271142 | | | CX 12 PA | | 50 | |
| -PVC with hard PVC coil | grey | 270401 | | | CF 12 EL | | 30 | |
| -PVC with steel braid | – | 270011 | | | CF 13 S | | 50 | |
| PUR with coil | – | 270411 | | | CF PUR 12 EL | | 22 | |
| Designation sleeve | transparent | 499995 | | | – | | 500 | |
| Plate 4x23mm for 499995 | – | 499988 | | | – | | 200 | |

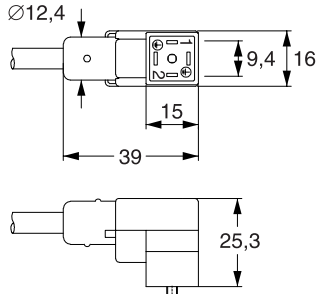
Comments
1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Suppression Technology - Suppressors for valves

Design CI (9.4 mm) PUR termination cable with bridged ground conductor (PE)



Dimensions



PIN assignment

709760, 709761

BN ———— C 1

BU ———— C 2

YE/GN ———— C PE

709762, 709763, 709764

BN/1 ———— C 1

BU/2 ———— C 2

YE/GN ———— C PE

709766, 709767, 709768

BN/1 ———— C 1

BU/2 ———— C 2

YE/GN ———— C PE

| Description | Part-No. | Type | PU | |
|--------------------------------|---------------|--------|-------------------------------|----|
| without component parts | | | | |
| Rated voltage | AC/DC 0–230 V | 709760 | L-CI-9760 2,5mPUR up to 230 V | 10 |
| | AC/DC 0–230 V | 709761 | L-CI-9761 5mPUR up to 230 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 709762 | LV-CI-9762 2,5mPUR 24 V | 10 |
| | AC/DC 24 V | 709763 | LV-CI-9763 5mPUR 24 V | 10 |
| | AC/DC 24 V | 709764 | LV-CI-9764 10mPUR 24 V | 10 |
| Suppressor diode | | | | |
| Rated voltage | AC/DC 24 V | 709766 | LV-CI-9766 2,5m PUR 24 V | 10 |
| | AC/DC 24 V | 709767 | LV-CI-9767 5,0m PUR 24 V | 10 |
| | AC/DC 24 V | 709768 | LV-CI-9768 10,0m PUR 24 V | 10 |

| Technical data | without component parts | | varistor | | | Suppressor diode | | |
|-------------------------------|---|------|-------------------------------|------|------|------------------------|------|------|
| Function type | Suppressors for valves | | | | | | | |
| Protection device | – | | varistor | | | Suppressor diode + LED | | |
| Rated voltage | AC/DC 0–230 V | | AC/DC 24 V | | | AC/DC 24 V | | |
| Current consumption per LED | – | | 3 mA | | | 4 mA | | |
| Shut-off points | – | | – | | | ≤52 V | | |
| Rated frequency | – | | 50–60 Hz | | | – | | |
| Holding Capacity | – | | – | | | ≤ 70VA | | |
| Type of connecting lead | PUR black / PVC 3 x 0.5 mm ² | | | | | | | |
| Length of connecting lead (M) | 2,5 | 5 | 2,5 | 5 | 10 | 2,5 | 5 | 10 |
| Connecting lead | diameter: 5.6 ± 0.15 mm | | | | | | | |
| General | | | | | | | | |
| Design | Design CI, contact clearance 9.4 mm (industry) | | | | | | | |
| Status indication | – | | – | | | LED yellow | | |
| Coil Current max. | ≤7 A | | – | | | ≤3 A | | |
| Conductor labelling | – | | colour-coded conductors | | | – | | |
| Housing material | TPU black ¹⁾ | | TPU transparent ¹⁾ | | | – | | |
| IP rating | – | | IP 67 | | | – | | |
| Field installation | Breakaway torque 0.4 Nm | | | | | | | |
| Termination | – | | | | | | | |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C– 90°C, moving -5°C – 80°C | | | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | | | |
| Dimensions (w x h x d) | 16.0 x 25.3 x 39.0 mm | | | | | | | |
| Weight (kg/piece) | 0.12 | 0.22 | 0.12 | 0.22 | 0.52 | 0.12 | 0.22 | 0.52 |
| Standards | – | | | | | | | |
| Approvals | – | | | | | | | |
| Accessories | | | | | | | | |
| Plate 4x11mm | white | | 681313 | | | BZT 0411 | | 100 |
| Protective pipes: | | | | | | | | |
| -PA | black | | 271142 | | | CX 12 PA | | 50 |
| -PVC with hard PVC coil | grey | | 270401 | | | CF 12 EL | | 30 |
| -PVC with steel braid | | | 270011 | | | CF 13 S | | 50 |
| PUR with coil | | | 270411 | | | CF PUR 12 EL | | 22 |
| Designation sleeve | transparent | | 499995 | | | | | 500 |
| Plate 4x23mm for 499995 | | | 499988 | | | | | 200 |

Comments

1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

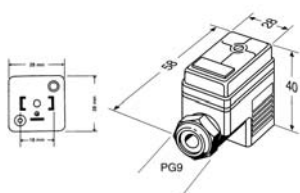
Suppression Technology - Suppressors for valves

Adjustable plug Design A (18 mm)

Ground wire terminator (PE) adjustable in 180° steps

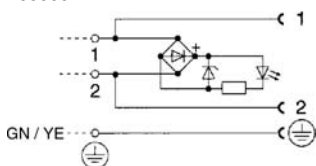


Dimensions

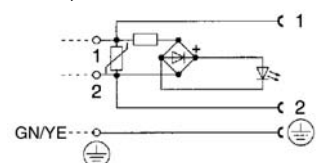


PIN assignment

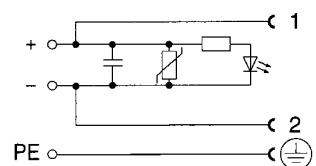
705505



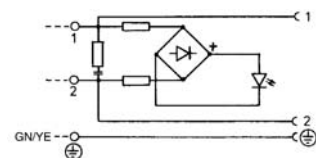
705507, 705506



707403



705502



| Description | Part-No. | Type | PU | |
|------------------|-------------|--------|---------------------------|----|
| Z-Diode | | | | |
| Rated voltage | AC/DC 24 V | 705505 | LZ-V10-5505 AC/DC 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 705507 | LV-V10-5507 AC/DC 24 V | 10 |
| | AC/DC 115 V | 705506 | LV-V10-5506 AC/DC 115 V | 10 |
| varistor | | | | |
| Rated voltage | DC 24 V | 707403 | LCV-V10-7403 DC 24 V | 10 |
| RC module | | | | |
| Rated voltage | AC/DC 230 V | 705502 | LRC-V10-05602 AC/DC 230 V | 10 |

| Technical data | Z-Diode | varistor | | RC module |
|-------------------------------|------------------------|-------------|---------|-------------|
| Function type | Suppressors for valves | | | |
| Protection device | Z-Diode | varistor | | RC module |
| Rated voltage | AC/DC 24 V | AC/DC 115 V | DC 24 V | AC/DC 230 V |
| Current consumption per LED | 4 mA | | | 3 mA |
| Shut-off points | ≤52 V | ≤100 V | ≤230 V | ≤100 V |
| Rated frequency | 50–60 Hz | | – | 50–60 Hz |
| Holding Capacity | 15 VA | 200 VA | 50 VA | 10 VA |
| Type of connecting lead | – | | | |
| Length of connecting lead (M) | – | | | |
| Connecting lead | – | | | |

General

| | | | | |
|-----------------------------|---|--|--|--|
| Design | Design A, contact clearance 18 mm | | | |
| Status indication | LED green | | | |
| Coil Current max. | ≤4 A | | | |
| Conductor labelling | – | | | |
| Housing material | PA black / transparent | | | |
| IP rating | IP 65 | | | |
| Field installation | 0° and 180° installation possible by rotating the coding disk | | | |
| Termination | Screw terminal: 0.5–1.5 mm ² | | | |
| Operation temperature range | -20°C – +60°C | | | |
| Storage temperature range | -25 °C – 80 °C | | | |
| Dimensions (w x h x d) | 28.0 x 40.0 x 58.0 mm | | | |
| Weight (kg/piece) | 0.04 | | | |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | |
| Approvals | – | | | |

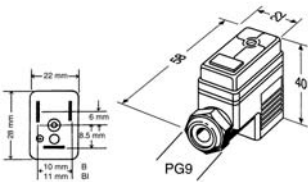
| Accessories | Colour | Article number | Type | Pkg. units |
|--------------|--------|----------------|----------|------------|
| Plate 9x20mm | white | 681315 | BZT 0920 | 100 |

Suppression Technology - Suppressors for valves

Adjustable plug Design B (10 mm) and BI (11 mm) Ground wire terminator (PE) adjustable in 180° steps

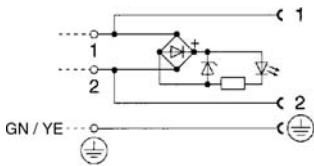


Dimensions

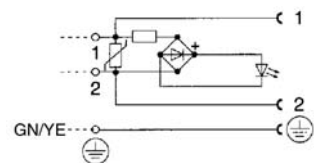


PIN assignment

705605, 705705



705707



| Description | Part-No. | Type | PU | |
|------------------|------------|--------|------------------------|----|
| Design B | | | | |
| Rated voltage | AC/DC 24 V | 705605 | LZ-V11-5605 AC/DC 24 V | 10 |
| Design BI | | | | |
| Rated voltage | AC/DC 24 V | 705705 | LZ-V12-5705 AC/DC 24 V | 10 |
| | AC/DC 24 V | 705707 | LV-V12-5707 AC/DC 24 V | 10 |

| Technical data | Design B | Design BI |
|-------------------------------|------------------------|-----------|
| Function type | Suppressors for valves | |
| Protection device | Z-Diode | varistor |
| Rated voltage | AC/DC 24 V | |
| Current consumption per LED | 4 mA | |
| Shut-off points | ≤52 V | ≤100 V |
| Rated frequency | 50–60 Hz | |
| Holding Capacity | 15 VA | 100 VA |
| Type of connecting lead | – | |
| Length of connecting lead (M) | – | |
| Connecting lead | – | |

| General | | |
|-----------------------------|---|-----------------------------------|
| Design | Type B, contact gap 10 mm | Design B, contact clearance 11 mm |
| Status indication | LED green | |
| Coil Current max. | – | |
| Conductor labelling | – | |
| Housing material | PA black / transparent | |
| IP rating | IP 65 | |
| Field installation | 0° and 180° installation possible by rotating the coding disk | |
| Termination | – | |
| Operation temperature range | -25 °C – 60 °C | |
| Storage temperature range | -25 °C – 80 °C | |
| Dimensions (w x h x d) | 22.0 x 40.0 x 58.0 mm | |
| Weight (kg/piece) | 0.03 | 0.04 |
| Standards | EN 175301-803 (DIN 43 650), ISO 6952 | – |

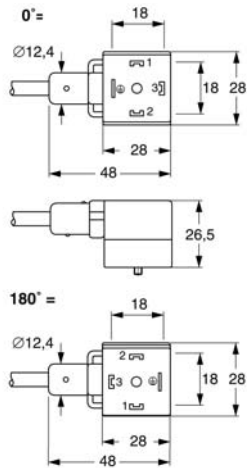
| Approvals | | | | |
|--------------|--------|----------------|----------|------------|
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Plate 9x20mm | white | 681315 | BZT 0920 | 100 |

Suppression Technology - Valve Suppressors - special function

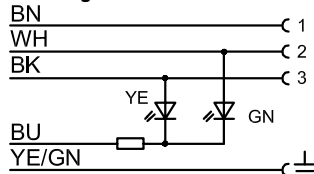
Design A (18 mm) PUR termination cable Pressure switch / fill level monitor



Dimensions



PIN assignment



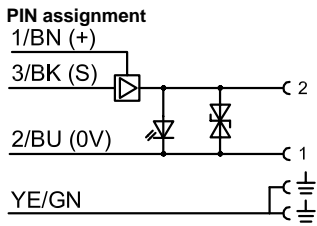
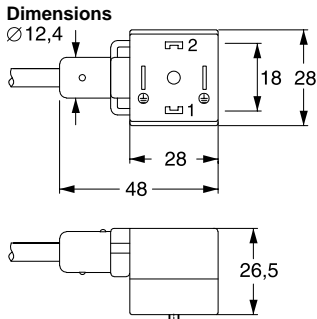
| Description | Part-No. | Type | PU | |
|--|--|-----------------------|------------------------------|-------------------|
| 0°; PE at the cable entry point | | | | |
| Rated voltage | DC 24 V | 709772 | LDS-A-9772 5,0m PUR DC 24 V | 10 |
| | DC 24 V | 709771 | LDS-A-9771 10,0m PUR DC 24 V | 10 |
| 180°; PE across from the cable entry point | | | | |
| Rated voltage | DC 24 V | 709782 | LDS-A-9782 5,0m PUR DC 24 V | 10 |
| | DC 24 V | 709789 | LDS-A-9789 10,0m PUR DC 24 V | 10 |
| Technical data | | | | |
| | 709772 | 709771 | 709782 | 709789 |
| Function type | Pressure switch / fill level monitor | | | |
| Protection device | - | | | |
| Rated voltage | DC 24 V | | | |
| Nominal voltage range | 30 V | | | |
| Current consumption per LED | 4 mA | | | |
| Power | - | | | |
| Rise time | - | | | |
| Saturated voltage at max. current | - | | | |
| Switching thresholds | - | | | |
| Accuracy | - | | | |
| Control current | - | | | |
| Switching current | ≤ 4 A | | | |
| Switching frequency | - | | | |
| Switch-on delay | - | | | |
| Switch-off delay | - | | | |
| Shut-off points | - | | | |
| Rated frequency | - | | | |
| Holding Capacity | - | | | |
| Type of connecting lead | PUR black / PVC 5 x 0.5 mm ² | | | |
| Length of connecting lead (M) | 5 | 10 | 5 | 10 |
| Connecting lead | Diameter: 5.6 + 0.15 mm | | | |
| Fittings | - | | | |
| Short-circuit protection | - | | | |
| General | | | | |
| Design | Design A, contact clearance 18 mm | | | |
| Status indication | LED yellow + LED green | | | |
| Galvanic isolation I/O | - | | | |
| Clearance/creep. dist. (control/load side) | - | | | |
| Derating | - | | | |
| Conductor labelling | colour-coded conductors | | | |
| Housing material | TPU transparent ¹⁾ | | | |
| IP rating | IP 67 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C – 90°C, moving -5°C – 80°C | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Dimensions (w x h x d) | 28.0 x 26.5 x 48.0 mm | | | |
| Weight (kg/piece) | 0.225 | 0.530 | 0.225 | 0.530 |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | |
| Termination | - | | | |
| Approvals | - | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Plate 7x20mm | white | 760968 | LG 6-0967 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| -PUR with Conduflex coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |
| Comments | | | | |
| 1) Very good chemical- and oil resistance. The material resistance must be checked based on the application for use with aggressive media. | | | | |

Suppression Technology - Valve Suppressors - special function

Design A (18 mm)

PVC termination cable

Switching amplifier, short-circuit-proof, 0°–180° installation



| Description | Part-No. | Type | PU | |
|-----------------------------------|----------|--------|-------------------------------|----|
| without galvanic isolation | | | | |
| Rated voltage | DC 24 V | 709690 | LVER-A-9690 2,5m PVC DC 24 V | 10 |
| | DC 24 V | 709691 | LVER-A-9691 5,0m PVC DC 24 V | 10 |
| | DC 24 V | 709692 | LVER-A-9692 10,0m PVC DC 24 V | 10 |
| | DC 24 V | 709694 | LVER-A-9694 20,0m PVC DC 24 V | 10 |

| Technical data | 709690 | 709691 | 709692 | 709694 |
|--|---|-----------------------|--------------|-------------------|
| Function type | Switching amplifier | | | |
| Protection device | Suppressor diode | | | |
| Rated voltage | DC 24 V | | | |
| Nominal voltage range | 19,2 – 30 V | | | |
| Current consumption per LED | 24 mA | | | |
| Power | – | | | |
| Rise time | – | | | |
| Saturated voltage at max. current | – | | | |
| Switching thresholds | – | | | |
| Accuracy | – | | | |
| Control current | 10 mA | | | |
| Switching current | 0.005A – 2 A | | | |
| Switching frequency | max. 20 Hz | | | |
| Switch-on delay | <100 µs | | | |
| Switch-off delay | <200 µs | | | |
| Shut-off points | ≤52 V | | | |
| Rated frequency | – | | | |
| Holding Capacity | 100 VA | | | |
| Type of connecting lead | PVC black / PVC 4 x 0.75 mm ² | | | |
| Length of connecting lead (M) | 2,5 | 5 | 10 | 20 |
| Connecting lead | Diameter: 6.4 ± 0.15 mm | | | |
| Fittings | – | | | |
| Short-circuit protection | yes | | | |
| General | | | | |
| Design | Design A, contact clearance 18 mm | | | |
| Status indication | LED yellow | | | |
| Galvanic isolation I/O | – | | | |
| Clearance/creep. dist. (control/load side) | – | | | |
| Derating | – | | | |
| Conductor labelling | colour-coded conductors | | | |
| Housing material | TPU transparent ¹⁾ | | | |
| IP rating | IP 67 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C– 80°C, moving -5°C – 70°C | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Dimensions (w x h x d) | 28.0 x 26.5 x 48.0 mm | | | |
| Weight (kg/piece) | 0.140 | 0.300 | 0.560 | 1.000 |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | |
| Termination | – | | | |
| Approvals | – | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Plate 7x20mm | white | 760968 | LG 6-0967 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| -PUR with Conduflex coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

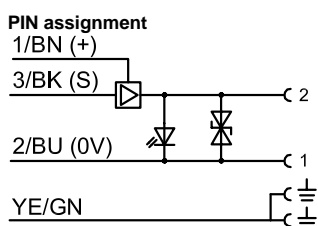
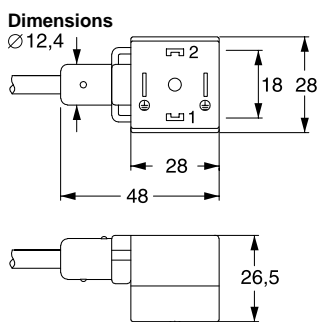
Comments
 1) Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media.

Suppression Technology - Valve Suppressors - special function

Design A (18 mm)

PUR termination cable

Switching amplifier, short-circuit-proof, 0°–180° installation



| Description | Part-No. | Type | PU | |
|-----------------------------------|----------|--------|-------------------------------|----|
| without galvanic isolation | | | | |
| Rated voltage | DC 24 V | 709790 | LVER-A-9790 2,5m PUR DC 24 V | 10 |
| | DC 24 V | 709791 | LVER-A-9791 5,0m PUR DC 24 V | 10 |
| | DC 24 V | 709792 | LVER-A-9792 10,0m PUR DC 24 V | 10 |
| | DC 24 V | 709794 | LVER-A-9794 20,0m PUR DC 24 V | 10 |

| Technical data | 709790 | 709791 | 709792 | 709794 |
|--|--|-----------------------|--------------|-------------------|
| Function type | Switching amplifier | | | |
| Protection device | Suppressor diode | | | |
| Rated voltage | DC 24 V | | | |
| Nominal voltage range | 19,2 – 30 V | | | |
| Current consumption per LED | 24 mA | | | |
| Power | – | | | |
| Rise time | – | | | |
| Saturated voltage at max. current | – | | | |
| Switching thresholds | – | | | |
| Accuracy | – | | | |
| Control current | – | | | |
| Switching current | 0.005A – 2A, short circuit protection | | | |
| Switching frequency | max. 20 Hz | | | |
| Switch-on delay | <100 µs | | | |
| Switch-off delay | <200 µs | | | |
| Shut-off points | ≤52 V | | | |
| Rated frequency | – | | | |
| Holding Capacity | 100 VA | | | |
| Type of connecting lead | PUR black / PVC 4 x 0.75 mm ² | | | |
| Length of connecting lead (M) | 2,5 | 5 | 10 | 20 |
| Connecting lead | Diameter: 6.4 ± 0.15 mm | | | |
| Fittings | – | | | |
| Short-circuit protection | yes | | | |
| General | | | | |
| Design | Design A, contact clearance 18 mm | | | |
| Status indication | LED yellow | | | |
| Galvanic isolation I/O | – | | | |
| Clearance/creep. dist. (control/load side) | – | | | |
| Derating | – | | | |
| Conductor labelling | colour-coded conductors | | | |
| Housing material | TPU transparent ¹⁾ | | | |
| IP rating | IP 67 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Operation temperature range | Connector: -25°C – 90°C, cable: fixed -30°C – 80°C, moving -5°C – 70°C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 28.0 x 26.5 x 48.0 mm | | | |
| Weight (kg/piece) | 0.140 | 0.300 | 0.560 | 1.000 |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | |
| Termination | – | | | |
| Approvals | – | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Plate 7x20mm | white | 760968 | LG 6-0967 | 100 |
| Protective pipes: | | | | |
| -PA | black | 271142 | CX 12 PA | 50 |
| -PVC with hard PVC coil | grey | 270401 | CF 12 EL | 30 |
| -PVC with steel braid | | 270011 | CF 13 S | 50 |
| -PUR with Conduflex coil | | 270411 | CF PUR 12 EL | 22 |
| Designation sleeve | transparent | 499995 | | 500 |
| Plate 4x23mm for 499995 | | 499988 | | 200 |

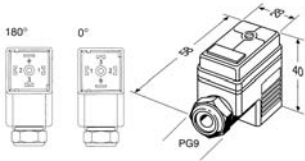
Comments
 1) Very good chemical- and oil resistance. The material resistance must be checked based on the application for use with aggressive media.

Suppression Technology - Valve Suppressors - special function

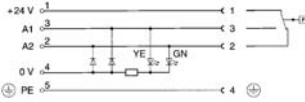
Design A (18 mm) adjustable plug Pressure switch / fill level monitor



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|---|---|-----------------------|----------------------------|-------------------|
| Rated voltage | DC 24 V | 707508 | LDS-V10-7508L 0° DC 24 V | 10 |
| Rated voltage | DC 24 V | 707507 | LDS-V10-7507R 180° DC 24 V | 10 |
| Technical data | | 707508 | 707507 | |
| Function type | Pressure switch / function monitor | | | |
| Protection device | Diode | | | |
| Rated voltage | DC 24 V | | | |
| Nominal voltage range | 18 – 30 V | | | |
| Current consumption per LED | 16 mA | | | |
| Power | – | | | |
| Rise time | – | | | |
| Saturated voltage at max. current | – | | | |
| Switching thresholds | – | | | |
| Accuracy | – | | | |
| Control current | – | | | |
| Switching current | ≤ 4 A | | | |
| Switching frequency | – | | | |
| Switch-on delay | – | | | |
| Switch-off delay | – | | | |
| Shut-off points | – | | | |
| Rated frequency | – | | | |
| Holding Capacity | 1600 V / 1 A | | | |
| Type of connecting lead | – | | | |
| Length of connecting lead (M) | – | | | |
| Connecting lead | – | | | |
| Fittings | PG 9 | | | |
| Short-circuit protection | – | | | |
| General | | | | |
| Design | Design A, contact clearance 18 mm | | | |
| Status indication | LED yellow + LED green | | | |
| Galvanic isolation I/O | – | | | |
| Clearance/creep. dist. (contol/load side) | – | | | |
| Derating | – | | | |
| Conductor labelling | – | | | |
| Housing material | PA transparent | | | |
| IP rating | IP 65 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -25 °C – 80 °C | | | |
| Dimensions (w x h x d) | 28.0 x 40.0 x 58.0 mm | | | |
| Weight (kg/piece) | 0.036 | | | |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | |
| Termination | Screw terminal: 0.5–1.5 mm ² | | | |
| Approvals | – | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Plate 9x20mm | white | 681315 | BZT 0920 | 100 |

Suppression Technology - Valve Suppressors - special function

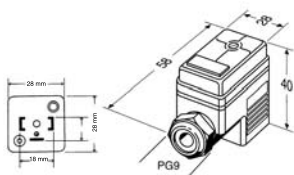
Adjustable plug; design A (18 mm)

Switching amplifier with and without galvanic isolation

Ground wire terminator, short-circuit-proof, 0°–180° installation

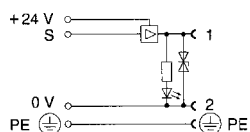


Dimensions

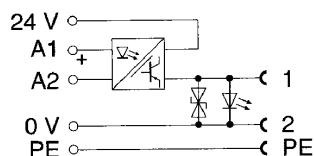


PIN assignment

705509, 706509



707409



| Description | Part-No. | Type | PU | |
|---|---|-----------------------|------------------------|-------------------|
| without galvanic isolation | | | | |
| Rated voltage | DC 24 V | 705509 | LVER-V10-5509 DC 24 V | 10 |
| | DC 24 V | 706509 | LVER-V10-6509 DC 24 V | 10 |
| with galvanic isolation | | | | |
| Rated voltage | DC 24 V | 707409 | LVER-V10-7409 DC 24 V | 10 |
| Technical data | | | | |
| | 705509 | 706509 | 707409 | |
| Function type | | Switching amplifier | | |
| Protection device | | Suppressor diode | | |
| Rated voltage | | DC 24 V | | |
| Nominal voltage range | | 18 – 30 V | | |
| Current consumption per LED | 21 mA | | 7 mA | |
| Power | | – | | |
| Rise time | | – | | |
| Saturated voltage at max. current | | – | | |
| Switching thresholds | | – | | |
| Accuracy | | – | | |
| Control current | 10 mA | | 7 mA | |
| Switching current | 0.005A – 2A, short circuit protection | | | |
| Switching frequency | max. 20 Hz | | | |
| Switch-on delay | <100 µs | | | |
| Switch-off delay | <200 µs | | | |
| Shut-off points | ≤52 V | | | |
| Rated frequency | – | | | |
| Holding Capacity | 100 VA | | | |
| Type of connecting lead | – | | | |
| Length of connecting lead (M) | – | | | |
| Connecting lead | – | | | |
| Fittings | PG 9 | | | |
| Short-circuit protection | yes | | | |
| General | | | | |
| Design | Design A, contact clearance 18 mm | | | |
| Status indication | LED yellow | | | |
| Galvanic isolation I/O | – | | 4.5 kV | |
| Clearance/creep. dist. (contol/load side) | – | | > 5.5 mm | |
| Derating | – | | | |
| Conductor labelling | – | | | |
| Housing material | PA black / transparent | PA grey / transparent | PA black / transparent | |
| IP rating | IP 65 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -25 °C – 80 °C | | | |
| Dimensions (w x h x d) | 28.0 x 40.0 x 58.0 mm | | | |
| Weight (kg/piece) | 0.039 | | 0.044 | |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | |
| Termination | Screw terminal: 0.5–1.5 mm ² | | | |
| Approvals | – | | | |
| Accessories | | | | |
| | Colour | Article number | Type | Pkg. units |
| Plate 9x20mm | white | 681315 | BZT 0920 | 100 |

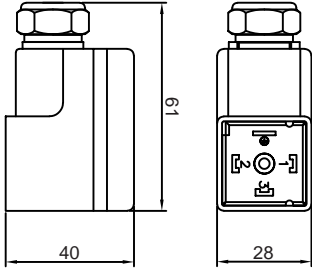
Suppression Technology - Valve Suppressors - special function

Adjustable plug; design A (18 mm)

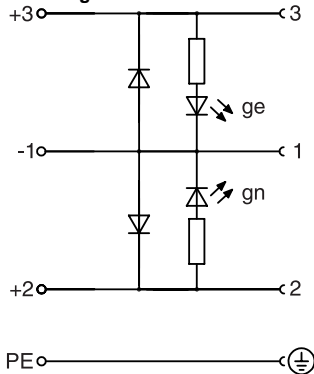
- Double valves
- Energy reducer



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|--|--|-----------------------|--------------|-------------------|
| Double valves | | | | |
| Rated voltage | DC 24 V | 705503 | LD-V10-5503 | |
| Energy reducer | | | | |
| Rated voltage | DC 24 V | 707512 | LBM-V10-7512 | |
| Technical data | | | | |
| | 705503 | 707512 | | |
| Function type | Double valve plug | Energy reducer | | |
| Protection device | | overload diode | | |
| Rated voltage | | DC 24 V | | |
| Nominal voltage range | | 18 – 30 V | | |
| Current consumption per LED | 6 mA | 24 mA | | |
| Power | Reduction factor 40–70%, at delivery 50% | | | |
| Rise time | Pulse duration approx. 200 ms | | | |
| Saturated voltage at max. current | – | 1.5 V | | |
| Switching thresholds | | – | | |
| Accuracy | | – | | |
| Control current | | – | | |
| Switching current | ≤4 A | ≤2 A | | |
| Switching frequency | | – | | |
| Switch-on delay | | – | | |
| Switch-off delay | | – | | |
| Shut-off points | | – | | |
| Rated frequency | | – | | |
| Holding Capacity | | 1000 V / 1 A | | |
| Type of connecting lead | | – | | |
| Length of connecting lead (M) | | – | | |
| Connecting lead | | – | | |
| Fittings | | PG 9 | | |
| Short-circuit protection | | – | | |
| General | | | | |
| Design | Design A, contact clearance 18 mm | | | |
| Status indication | LED green / LED yellow | LED yellow | | |
| Galvanic isolation I/O | | – | | |
| Clearance/creep. dist. (control/load side) | | – | | |
| Derating | | – | | |
| Conductor labelling | | – | | |
| Housing material | PA black / transparent | | | |
| IP rating | IP 65 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -25 °C – 80 °C | | | |
| Dimensions (w x h x d) | 28.0 x 40.0 x 58.0 mm | | | |
| Weight (kg/piece) | 0.035 | | | |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | |
| Termination | Screw terminal: 0.5–1.5 mm ² | | | |
| Approvals | – | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Plate 9x20mm | white | 681315 | BZT 0920 | 100 |

Suppression Technology - Valve Suppressors - special function

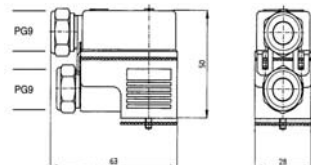
Adjustable plug; design A (18 mm)

- two cable entry points

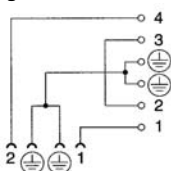
Ground wire terminator (PE) adjustable in 180° steps



Dimensions



PIN assignment



| Description | Part-No. | Type | PU |
|---|---|-----------------------|--------------------------|
| without protection device | | | |
| Rated voltage | AC/DC 0–230 V | 707514 | LPG-V10-7514 up to 230 V |
| Technical data | | | |
| 707514 | | | |
| Function type | Valve suppressors with two cable entry points | | |
| Protection device | without | | |
| Rated voltage | AC/DC 0–230 V | | |
| Nominal voltage range | 0 – 230 V | | |
| Current consumption per LED | – | | |
| Power | – | | |
| Rise time | – | | |
| Saturated voltage at max. current | – | | |
| Switching thresholds | – | | |
| Accuracy | – | | |
| Control current | – | | |
| Switching current | ≤ 4 A | | |
| Switching frequency | – | | |
| Switch-on delay | – | | |
| Switch-off delay | – | | |
| Shut-off points | – | | |
| Rated frequency | 50–60 Hz | | |
| Holding Capacity | – | | |
| Type of connecting lead | – | | |
| Length of connecting lead (M) | – | | |
| Connecting lead | – | | |
| Fittings | PG 9 | | |
| Short-circuit protection | – | | |
| General | | | |
| Design | Design A, contact clearance 18 mm | | |
| Status indication | – | | |
| Galvanic isolation I/O | – | | |
| Clearance/creep. dist. (contol/load side) | – | | |
| Derating | – | | |
| Conductor labelling | – | | |
| Housing material | PA black / transparent | | |
| IP rating | IP 65 | | |
| Field installation | Breakaway torque 0.4 Nm | | |
| Operation temperature range | -25 °C – 60 °C | | |
| Storage temperature range | -25 °C – 80 °C | | |
| Dimensions (w x h x d) | 28.0 x 50.0 x 63.0 mm | | |
| Weight (kg/piece) | 0.030 | | |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | |
| Termination | Screw terminal: 0.5–1.5 mm ² | | |
| Approvals | – | | |
| Accessories | Colour | Article number | Type |
| Plate 9x20mm | white | 681315 | BZT 0920 |
| | | | 100 |

Suppression Technology - Valve Suppressors - special function

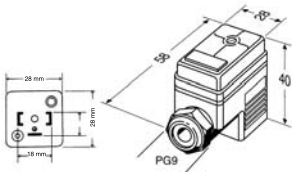
Adjustable plug; design A (18 mm)

- Current and voltage control

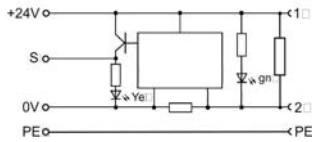
- Status output



Dimensions



PIN assignment



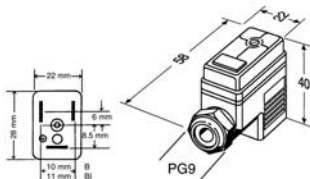
| Description | Part-No. | Type | PU | |
|---|---|-----------------------|--------------|-------------------|
| Rated voltage | DC 24 V | 707518 | LVUE-VC-7518 | 10 |
| Technical data | | 707518 | | |
| Function type | Current and voltage control | | | |
| Protection device | varistor | | | |
| Rated voltage | DC 24 V | | | |
| Nominal voltage range | 21,6 – 28 V | | | |
| Current consumption per LED | 16 mA | | | |
| Power | – | | | |
| Rise time | – | | | |
| Saturated voltage at max. current | – | | | |
| Switching thresholds | Voltage ok: ≥ 17 V Current ok: ≥ 50 mA | | | |
| Accuracy | ± 10 % | | | |
| Control current | – | | | |
| Switching current | ≤ 2 A | | | |
| Switching frequency | – | | | |
| Switch-on delay | – | | | |
| Switch-off delay | – | | | |
| Shut-off points | ≤ 52 V | | | |
| Rated frequency | – | | | |
| Holding Capacity | 10 VA | | | |
| Type of connecting lead | – | | | |
| Length of connecting lead (M) | – | | | |
| Connecting lead | – | | | |
| Fittings | PG 9 | | | |
| Short-circuit protection | – | | | |
| General | | | | |
| Design | Design A, contact clearance 18 mm | | | |
| Status indication | Voltage: LED green / Current: LED yellow | | | |
| Galvanic isolation I/O | – | | | |
| Clearance/creep. dist. (contol/load side) | – | | | |
| Derating | – | | | |
| Conductor labelling | – | | | |
| Housing material | PA black / transparent | | | |
| IP rating | IP 65 | | | |
| Field installation | Breakaway torque 0.4 Nm | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -25 °C – 80 °C | | | |
| Dimensions (w x h x d) | 28.0 x 40.0 x 58.0 mm | | | |
| Weight (kg/piece) | 0.035 | | | |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | |
| Termination | Screw terminal: 0.5 – 1.5 mm ² | | | |
| Approvals | – | | | |
| Accessories | Colour | Article number | Type | Pkg. units |
| Plate 9x20mm | white | 681315 | BZT 0920 | 100 |

Suppression Technology - Valve Suppressors - special function

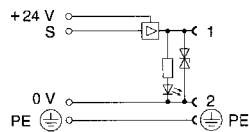
Adjustable plug; Design B (10 mm), Design BI (11 mm)
 Switching amplifier without galvanic isolation, short circuit protection
 Ground wire terminator (PE) adjustable in 180° steps



Dimensions



PIN assignment



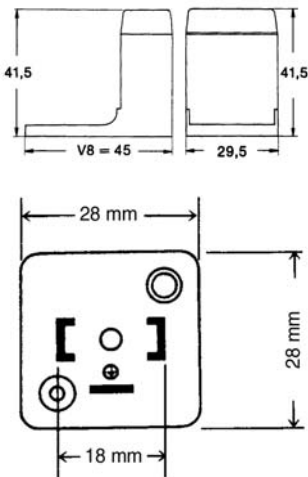
| Description | Part-No. | Type | PU |
|--|--------------------------------------|---|-----------------------|
| Design B | | | |
| Rated voltage | DC 24 V | 705610 | LVER-V11-5610 DC 24 V |
| Design BI | | | |
| Rated voltage | DC 24 V | 705709 | LVER-V12-5709 DC 24 V |
| Technical data | | | |
| | 705610 | 705709 | |
| Function type | | Switching amplifier | |
| Protection device | | Suppressor diode | |
| Rated voltage | | DC 24 V | |
| Nominal voltage range | | 18 – 30 V | |
| Current consumption per LED | | 19 mA | |
| Power | | – | |
| Rise time | | – | |
| Saturated voltage at max. current | | – | |
| Switching thresholds | | – | |
| Accuracy | | – | |
| Control current | | 8 mA | |
| Switching current | | 0.005A – 2A | |
| Switching frequency | | max. 20 Hz | |
| Switch-on delay | | <100 µs | |
| Switch-off delay | | <200 µs | |
| Shut-off points | | ≤52 V | |
| Rated frequency | | – | |
| Holding Capacity | | 100 VA | |
| Type of connecting lead | | – | |
| Length of connecting lead (M) | | – | |
| Connecting lead | | – | |
| Fittings | | – | |
| Short-circuit protection | | yes | |
| General | | | |
| Design | Design B | Design BI | |
| Status indication | | LED green | |
| Galvanic isolation I/O | | No | |
| Clearance/creep. dist. (control/load side) | | – | |
| Derating | | No | |
| Conductor labelling | | – | |
| Housing material | | PA black / transparent | |
| IP rating | | IP 65 | |
| Field installation | | Breakaway torque 0.4 Nm | |
| Operation temperature range | | -25 °C – 60 °C | |
| Storage temperature range | | -25 °C – 80 °C | |
| Dimensions (w x h x d) | | 22.0 x 40.0 x 58.0 mm | |
| Weight (kg/piece) | | 0.036 | |
| Standards | EN 175301-803 (DIN 43 650), ISO 6952 | – | |
| Termination | | Screw terminal: 0.5–1.5 mm ² | |
| Approvals | | – | |
| Accessories | | | |
| | Colour | Article number | Type |
| Plate 9x20mm | white | 681315 | BZT 0920 |
| | | | Pkg. units |
| | | | 100 |

Suppression Technology - Valve Suppressors

Plug adaptor for valve suppressors type A Contact clearance 18 mm EN 175301-803 (DIN 43 650)

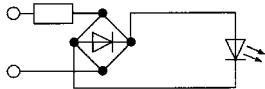


Dimensions



PIN assignment

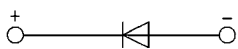
700891



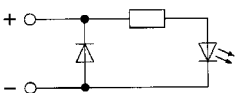
700893



700862



700861, 700863



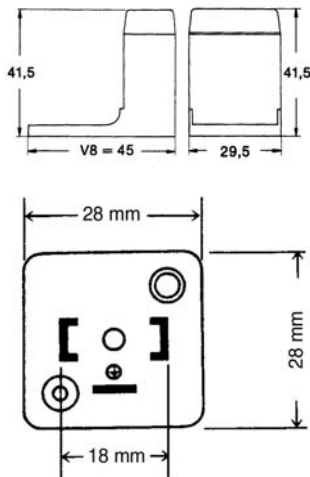
| Description | Part-No. | | Type | PU | |
|-----------------------------|--|---------------|-------------------------|---------------|---------------|
| LED | | | | | |
| Rated voltage | AC/DC 24 V | 700891 | LLED-V8-0891 AC/DC 24 V | 10 | |
| Glow lamp | | | | | |
| Rated voltage | AC 230 V | 700893 | LGL-V8-0893 AC 230 V | 10 | |
| Diode | | | | | |
| Rated voltage | DC 24–230 V | 700862 | LD-V8-0862 DC 24-230 V | 10 | |
| Diode + LED | | | | | |
| Rated voltage | DC 24 V | 700861 | LD-V8-0861 DC 24 V | 10 | |
| Rated voltage | DC 24 V | 700863 | LD-V8-0863 DC 24 V | 10 | |
| Technical data | | | | | |
| | 700891 | 700893 | 700862 | 700861 | 700863 |
| Function type | Plug adaptor | | | | |
| Protection device | LED | Glow lamp | Diode | Diode + LED | |
| Rated voltage | AC/DC 24 V | AC 230 V | DC 24–230 V | DC 24 V | |
| Current consumption per LED | 4 mA | – | – | 4 mA | |
| Shut-off points | – | | 1 V | | |
| Rated frequency | 50–60 Hz | | – | | |
| Holding Capacity | 200 VA | | 1300 V / 3 A | 1600 V / 1 A | 1300 V / 3 A |
| General | | | | | |
| Design | Plug adaptor V8 | | | | |
| Status indication | LED green | Glow lamp | – | LED green | |
| Coil Current max. | – | | | | |
| Conductor labelling | – | | | | |
| Housing material | PA black / transparent | | | | |
| IP rating | IP 65 | | | | |
| Field installation | pluggable on solenoid coil, plug seal not applicable | | | | |
| Operation temperature range | -20 – 60 °C | | | | |
| Storage temperature range | -25 – 80 °C | | | | |
| Dimensions (w x h x d) | 29.5 x 41.5 x 45.0 mm | | | | |
| Weight (kg/piece) | 0.010 | | | | |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | | |
| Approvals | – | | | | |

Suppression Technology - Valve Suppressors

Plug adaptor for valve suppressors type A Contact clearance 18 mm EN 175301-803 (DIN 43 650)

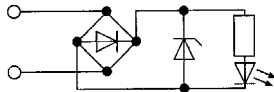


Dimensions

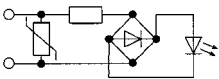


PIN assignment

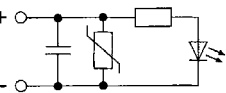
700897



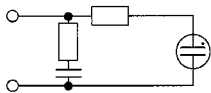
700881



700867



700910, 700857



| Description | Part-No. | Type | PU | |
|-----------------------------|------------|--------|------------------------|----|
| Z-Diode | | | | |
| Rated voltage | AC/DC 24 V | 700897 | LZ-V8-0897 AC/DC 24 V | 10 |
| varistor | | | | |
| Rated voltage | AC/DC 24 V | 700881 | LV-V8-0881N AC/DC 24 V | 10 |
| Varistor + Capacitor | | | | |
| Rated voltage | DC 24 V | 700867 | LCV-V8T-0867 DC 24 V | 10 |
| RC module | | | | |
| Rated voltage | AC 48 V | 700905 | LRC-V8T-0905 AC 48 V | 20 |
| RC module | | | | |
| Rated voltage | AC 115 V | 700910 | LRC-V8-0910 AC 115 V | 10 |
| | AC 230 V | 700857 | LRC-V8-0857 AC 230 V | 10 |

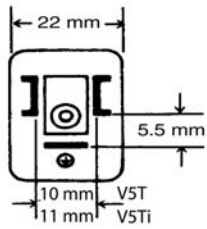
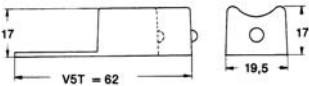
| Technical data | 700897 | 700881 | 700867 | 700905 | 700910 | 700857 |
|-----------------------------|--|----------|----------------------|-----------|----------|----------|
| Function type | Plug adaptor | | | | | |
| Protection device | Z-Diode | varistor | Varistor + Capacitor | RC module | | |
| Rated voltage | AC/DC 24 V | | DC 24 V | AC 48 V | AC 115 V | AC 230 V |
| Current consumption per LED | 4 mA | | - | | | |
| Shut-off points | ≤52 V | ≤100 V | | ≤90 V | ≤250 V | ≤300 V |
| Rated frequency | 50–60 Hz | | - | | 50–60 Hz | |
| Holding Capacity | 15 VA | 200 VA | 50 VA | 10 VA | | |
| General | | | | | | |
| Design | A (V8) | | A (V8T) | | A (V8) | |
| Status indication | LED green | | | Glow lamp | | |
| Coil Current max. | - | | | | | |
| Conductor labelling | - | | | | | |
| Housing material | PA black / transparent | | | | | |
| IP rating | IP 65 | | | | | |
| Field installation | pluggable on solenoid coil, plug seal not applicable | | | | | |
| Operation temperature range | -20 – 60 °C | | | | | |
| Storage temperature range | -25 – 80 °C | | | | | |
| Dimensions (w × h × d) | 29.5 × 41.5 × 45.0 mm | | | | | |
| Weight (kg/piece) | 0.010 | | | | | |
| Standards | EN 175301-803 (DIN 43 650), ISO 4400 | | | | | |
| Approvals | - | | | | | |

Suppression Technology - Valve Suppressors

Plug adaptor for valve suppressors type B (10 mm)
 Plug adaptor for valve suppressors type BI (11 mm)
 Contact arrangement in 0° and 180° design



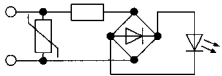
Dimensions



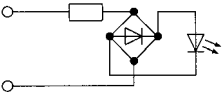
| Description | Part-No. | | Type | PU | | |
|-----------------------------|-------------------------------------|---------------|---------------------------------|--|---------------|---------------|
| varistor | | | | | | |
| Rated voltage | AC/DC 24 V | 705441 | LV-V5T-5441 0° AC/DC 24 V | 10 | | |
| | AC/DC 24 V | 705241 | LV-V5T-5241 180° AC/DC 24 V | 10 | | |
| Rated voltage | AC/DC 24 V | 705341 | LV-V5TI-5341 0° AC/DC 24 V | 10 | | |
| | AC/DC 24 V | 705141 | LV-V5TI-5141 180° AC/DC 24 V | 10 | | |
| | AC 230 V | 705371 | LRC-V5TI-5371 0° AC 110-230 V | 10 | | |
| | AC 230 V | 705171 | LRC-V5TI-5171 180° AC 110-230 V | 10 | | |
| Technical data | | | | | | |
| | 705441 | 705241 | 705341 | 705141 | 705371 | 705171 |
| Function type | Plug adaptor V5T, V5TI | | | | | |
| Protection device | Varistor + LED | | | RC module + LED | | |
| Rated voltage | AC/DC 24 V | | | AC 230 V | | |
| Current consumption per LED | 4 mA | | | 3 mA | | |
| Shut-off points | ≤100 V | | | ≤300 V | | |
| Rated frequency | | | | 50–60 Hz | | |
| Holding Capacity | 200 VA | | | 10 VA | | |
| General | | | | | | |
| Design | Design B (V5T) | | | Design B (V5TI) | | |
| Status indication | | | | LED green | | |
| Coil Current max. | | | | – | | |
| Conductor labelling | | | | – | | |
| Housing material | | | | PA black | | |
| IP rating | | | | IP 65 assembled | | |
| Field installation | | | | pluggable on solenoid coil, plug seal not applicable | | |
| Operation temperature range | | | | -20 – 60 °C | | |
| Storage temperature range | | | | -25 – 80 °C | | |
| Dimensions (w x h x d) | | | | 19.5 x 17.0 x 62.0 mm | | |
| Weight (kg/piece) | | | | 0.016 | | |
| Standards | EN 175301-803 (DIN 43650), ISO 4400 | | | – | | |
| Approvals | | | | – | | |

PIN assignment

705441, 705241, 705341, 705141



705371, 705171

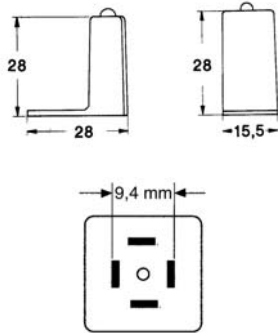


Suppression Technology - Valve Suppressors

Plug adaptor for valve suppressors type CI Contact clearance 9.4 mm

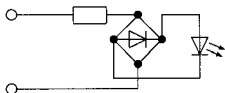


Dimensions

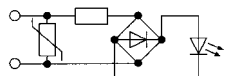


PIN assignment

700774



700770



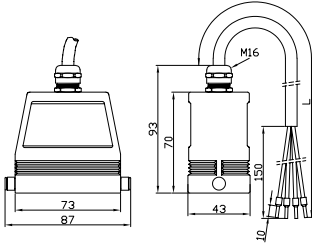
| Description | Part-No. | Type | PU |
|-----------------------------|---------------|--|-------------------------|
| LED | | | |
| Rated voltage | AC/DC 24 V | 700774 | LLED-V7-0774 AC/DC 24 V |
| Varistor + LED | | | |
| Rated voltage | AC/DC 24 V | 700770 | LV-V7-0770 AC/DC 24 V |
| Technical data | | | |
| | 700774 | 700770 | |
| Function type | | Plug adaptor | |
| Protection device | LED | Varistor + LED | |
| Rated voltage | | AC/DC 24 V | |
| Current consumption per LED | | - | |
| Shut-off points | | - | |
| Rated frequency | | - | |
| Holding Capacity | - | 200 VA | |
| General | | | |
| Design | | Design CI (V7) | |
| Status indication | LED red | LED green | |
| Coil Current max. | | - | |
| Conductor labelling | | - | |
| Housing material | | PA black | |
| IP rating | | IP 65 | |
| Field installation | | pluggable on solenoid coil, plug seal not applicable | |
| Operation temperature range | | -20 – 60 °C | |
| Storage temperature range | | -25 – 80 °C | |
| Dimensions (w x h x d) | | 15.5 x 28.0 x 28.0 mm | |
| Weight (kg/piece) | | 0.006 | |
| Standards | | - | |
| Approvals | | - | |

Suppression Technology - Motor suppression

Motor connecting plug ST 10: Integrated interference suppression, pur cable Star- and delta-connection design Protection device: Varistor

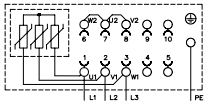


Dimensions

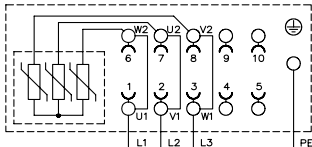


PIN assignment

706170, 706171, 706172



706173, 706174, 706175



| Description | Part-No. | Type | PU | |
|-------------|----------|--------|-----------------------------------|----|
| Description | Star | 706170 | LV-ST10-6170 3m PUR AC 3x400V ST | 10 |
| | Star | 706171 | LV-ST10-6171 5m PUR AC 3x400V ST | 10 |
| | Star | 706172 | LV-ST10-6172 10m PUR AC 3x400V ST | 10 |
| | Delta | 706173 | LV-ST10-6173 3m PUR AC 3x400V DR | 10 |
| | Delta | 706174 | LV-ST10-6174 5m PUR AC 3x400V DR | 10 |
| | Delta | 706175 | LV-ST10-6175 10m PUR AC 3x400V DR | 10 |

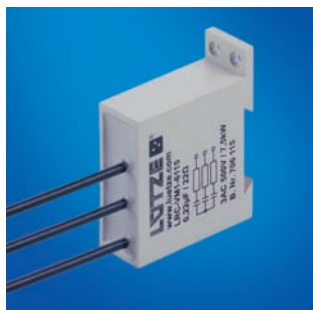
| Technical data | 706170 | 706171 | 706172 | 706173 | 706174 | 706175 |
|-----------------------------------|--|--------|--------|------------------------|--------|--------|
| Function type | Motor suppression | | | | | |
| Protection device | varistor | | | | | |
| Rated voltage | 3 ACx400 V | | | | | |
| Shut-off points | ≤620 V | | | | | |
| Rated frequency | 10–400 Hz | | | | | |
| Motor performance | 5.5 kW | | | | | |
| Inverse voltage/switching current | – | | | | | |
| Holding Capacity | – | | | | | |
| Type of connecting lead | PUR black / PVC black; 4 x 1.5 mm ² | | | | | |
| Length of connecting lead (M) | 3 | 5 | 10 | 3 | 5 | 10 |
| Connecting lead | Diameter: 9.3 mm | | | | | |
| Termination | – | | | | | |
| Fittings | M16 | | | | | |
| Suppression type | Motor connection star | | | Motor connection delta | | |
| General | | | | | | |
| Design | Connectors, 10-pole + PE (ST10) | | | | | |
| Status indication | – | | | | | |
| Conductor labelling | white number overprint | | | | | |
| Housing material | Aluminium die-casting with grey epoxy powder coating | | | | | |
| IP rating | IP 65 plugged | | | | | |
| Pottant | – | | | | | |
| Field installation | Motor terminal box with plug connection | | | | | |
| Operation temperature range | -25 °C – 80 °C | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Dimensions (w x h x d) | 87.0 x 93.0 x 43.0 mm | | | | | |
| Weight (kg/piece) | 0.610 | | | | | |
| Standards | VDE 0627, DIN 43 652 | | | | | |
| Approvals | – | | | | | |

Suppression Technology - Motor suppression

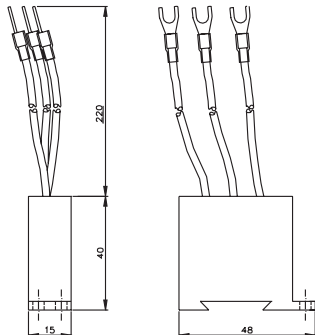
Motor suppression for the direct installation in the motor junction plate

7.5 kW; 3 AC x 500 V

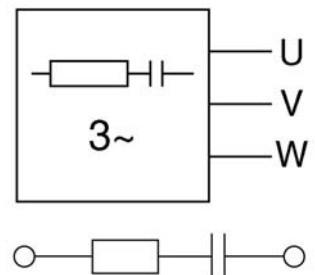
Protection device: RC module



Dimensions



PIN assignment



| Description | Part-No. | Type | PU |
|-----------------------------------|--|---------------|-------------------------|
| RC module | | | |
| Description | RC module | 706115 | LRC-VM1-6115 3 AC 500 V |
| Technical data | | | |
| | | 706115 | |
| Function type | Motor suppression | | |
| Protection device | RC module | | |
| Rated voltage | 3 ACx500 V | | |
| Shut-off points | - | | |
| Rated frequency | 50-60 Hz | | |
| Motor performance | 7.5 kW | | |
| Inverse voltage/switching current | - | | |
| Holding Capacity | - | | |
| Type of connecting lead | H05V-K 1.0 mm ² ; black | | |
| Length of connecting lead (M) | 0,22 | | |
| Connecting lead | - | | |
| Termination | 3 wires with fork-type cable lug M4 | | |
| Fittings | - | | |
| Suppression type | Motor connection star | | |
| General | | | |
| Design | VM1 | | |
| Status indication | - | | |
| Conductor labelling | - | | |
| Housing material | PPO | | |
| IP rating | IP 67 | | |
| Pottant | 2-components | | |
| Field installation | For inserting in the motor junction plate, for the bolting on with mounting hole M4 or for attachment to hat profile TS35 with 2 snap-on sockets (accessory) | | |
| Operation temperature range | -20 °C – 60 °C | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Dimensions (w x h x d) | 15.0 x 40.0 x 48.0 mm | | |
| Weight (kg/piece) | 0.049 | | |
| Standards | - | | |
| Approvals | - | | |

| Accessories | Colour | Article number | Description | Pkg. units |
|-------------------------------------|--------|----------------|---|------------|
| Snap-on socket for hat profile TS35 | | 700499 | Socket for attaching of the suppressor module to hat profile TS35 (EN 50022) or G-rails | 10 |

Suppression Technology - Motor suppression

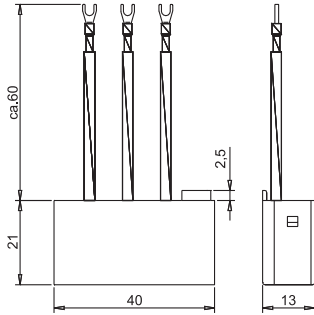
Motor suppression for the direct installation in the motor junction plate

5.5 kW to 7.5 kW; 3 AC x 500 V

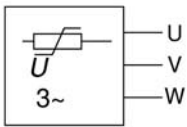
Protection device: Varistor



Dimensions



PIN assignment



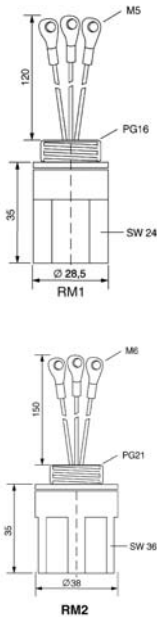
| Description | Part-No. | Type | PU | |
|-----------------------------------|----------|---|------------------------|----|
| varistor | | | | |
| Description | varistor | 706120 | LV-S10-6120 3 AC 500 V | 10 |
| | varistor | 706121 | LV-S10-6121 3 AC 500 V | 10 |
| Technical data | | 706120 | 706121 | |
| Function type | | Motor suppression | | |
| Protection device | | varistor | | |
| Rated voltage | | 3 ACx400 V | | |
| Shut-off points | | ≤620 V | | |
| Rated frequency | | 10–400 Hz | | |
| Motor performance | 5.5 kW | | 7.5 kW | |
| Inverse voltage/switching current | | – | | |
| Holding Capacity | | – | | |
| Type of connecting lead | | LIH; 1.5 mm ² ; black | | |
| Length of connecting lead (M) | | 0,059 | | |
| Connecting lead | | – | | |
| Termination | | 3 wires with fork-type cable lug M4 | | |
| Fittings | | – | | |
| Suppression type | | Motor connection star | | |
| General | | | | |
| Design | | S10 | | |
| Status indication | | – | | |
| Conductor labelling | | – | | |
| Housing material | | PA 6.6 | | |
| IP rating | | IP 67 | | |
| Pottant | | 2-components | | |
| Field installation | | for inserting in the motor junction plate | | |
| Operation temperature range | | -20 °C – 60 °C | | |
| Storage temperature range | | -40 °C – 90 °C | | |
| Dimensions (w x h x d) | | 40.0 x 21.0 x 13.0 mm | | |
| Weight (kg/piece) | | 0.023 | | |
| Standards | | – | | |
| Approvals | | – | | |

Suppression Technology - Motor suppression

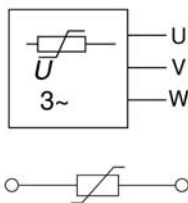
Motor suppression for the screwing in in the motor terminal box
 also suitable for frequency converters up to 15 kW; 3 AC x 575 V
 Protection device: Varistor



Dimensions



PIN assignment



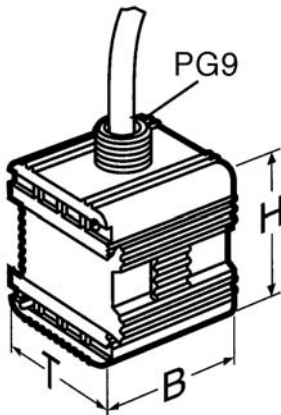
| Description | Part-No. | | Type | | PU | |
|-----------------------------------|--|---------------|---------------|-----------------------|---------------|---------------|
| Description | Varistor 4 kW | 701530 | LV-RM1-1530 | 3 AC 400 V | 10 | |
| | Varistor 4 kW | 701533 | LV-RM1-1533 | 3 AC 575 V | 10 | |
| | Varistor 7.5 kW | 701531 | LV-RM2-1531 | 3 AC 400 V | 10 | |
| | Varistor 7.5 kW | 701534 | LV-RM2-1534 | 3 AC 575 V | 10 | |
| | Varistor 15 kW | 701532 | LV-RM2-1532 | 3 AC 400 V | 10 | |
| | Varistor 15 kW | 701535 | LV-RM2-1535 | 3 AC 575 V | 10 | |
| Technical data | 701530 | 701533 | 701531 | 701534 | 701532 | 701535 |
| Function type | Motor suppression | | | | | |
| Protection device | varistor | | | | | |
| Rated voltage | 3 ACx400 V | 3 ACx575 V | 3 ACx400 V | 3 ACx575 V | 3 ACx400 V | 3 ACx575 V |
| Shut-off points | ≤940 V | ≤1240 V | ≤940 V | ≤1240 V | ≤940 V | ≤1240 V |
| Rated frequency | 10–400 Hz | | | | | |
| Motor performance | 4 kW | | 7.5 kW | | 15 kW | |
| Inverse voltage/switching current | – | | | | | |
| Holding Capacity | – | | | | | |
| Type of connecting lead | H07V-K 1.5 mm ² , black | | | | | |
| Length of connecting lead (M) | 0,12 | | 0,15 | | | |
| Connecting lead | – | | | | | |
| Termination | Ring terminal M5 | | | Ring terminal M6 | | |
| Fittings | M16 x 1.5 | | | M32 x 1.5 | | |
| Suppression type | – | | | | | |
| General | | | | | | |
| Design | RM1 | | | RM2 | | |
| Status indication | – | | | | | |
| Conductor labelling | – | | | | | |
| Housing material | Noryl | | | | | |
| IP rating | IP 67 | | | | | |
| Pottant | 2-components | | | | | |
| Field installation | Can be screwed in directly in the terminal housing (M32) | | | | | |
| Operation temperature range | -20 °C – 60 °C | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Dimensions (w x h x d) | 28.5 x 45.5 x 24.0 mm | | | 38.0 x 45.5 x 36.0 mm | | |
| Weight (kg/piece) | 0.040 | | 0.075 | | 0.800 | |
| Standards | – | | | | | |
| Approvals | – | | | | | |

Suppression Technology - Motor suppression

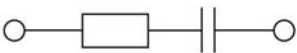
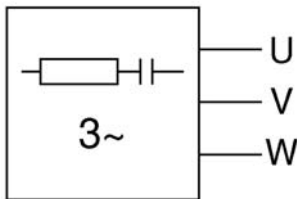
Motor suppression for the screwing in in the motor terminal box to 7.5 kW; 3 AC x 575 V
Protection device: RC module



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|------------------|--------|------------------------|----|
| Description | RC module 4 kW | 700372 | LRC-M5-0372 3 AC 400 V | 10 |
| | RC module 4 kW | 700374 | LRC-M5-0374 3 AC 500 V | 10 |
| | RC module 7.5 kW | 700373 | LRC-M5-0373 3 AC 400 V | 10 |
| | RC module 7.5 kW | 700375 | LRC-M5-0375 3 AC 500 V | 10 |
| | RC module 7.5 kW | 700379 | LRC-M5-0379 3 AC 575 V | 10 |

| Technical data | 700372 | 700374 | 700373 | 700375 | 700379 |
|-----------------------------------|---|------------|------------------|------------|------------|
| Function type | Motor suppression | | | | |
| Protection device | RC module | | | | |
| Rated voltage | 3 ACx400 V | 3 ACx500 V | 3 ACx400 V | 3 ACx500 V | 3 ACx575 V |
| Shut-off points | - | | | | |
| Rated frequency | 50-60 Hz | | | | |
| Motor performance | 4 kW | | 7.5 kW | | |
| Inverse voltage/switching current | - | | | | |
| Holding Capacity | - | | | | |
| Type of connecting lead | PVC 3 x 1.0 mm ² | | | | |
| Length of connecting lead (M) | 0,5 | | | | |
| Connecting lead | Diameter: 6.3 mm | | | | |
| Termination | Ring terminal M5 | | Ring terminal M6 | | |
| Fittings | PG 9 | | | | |
| Suppression type | Motor connection star | | | | |
| General | | | | | |
| Design | M5 | | | | |
| Status indication | - | | | | |
| Conductor labelling | - | | | | |
| Housing material | PA 6.6 | | | | |
| IP rating | IP 67 | | | | |
| Pottant | 2-components | | | | |
| Field installation | Can be screwed in directly in the terminal housing, with cable ties at the motor supply line for attachment or with 2 snap-on sockets (accessory) | | | | |
| Operation temperature range | -20 °C – 60 °C | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | |
| Dimensions (w x h x d) | 40.0 x 40.0 x 40.0 mm | | | | |
| Weight (kg/piece) | 0.113 | | | | |
| Standards | - | | | | |
| Approvals | - | | | | |

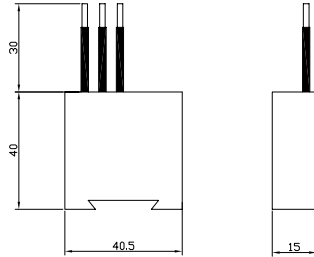
| Accessories | Colour | Article number | Description | Pkg. units |
|-------------------------------------|--------|----------------|---|------------|
| Snap-on socket for hat profile TS35 | | 700499 | Socket for attaching of the suppressor module to hat profile TS35 (EN 50022) or G-rails | 10 |

Suppression Technology - Motor suppression

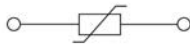
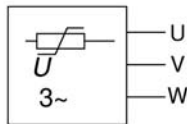
Universal motor suppression: direct attachment to the switch (e.g. Siemens SIRIUS 3RT 10) also suitable for frequency converters up to 7.5 kW; 3 AC x 575 V
Protection device: Varistor



Dimensions



PIN assignment



| Description | Part-No. | Type | PU |
|-----------------------------------|------------------------------------|---------------|-----------------------------|
| varistor | | | |
| Description | varistor | 706167 | LV-VM1-6167 3 AC 575V 7,5KW |
| | | | 10 |
| Technical data | | 706167 | |
| Function type | Motor suppression | | |
| Protection device | varistor | | |
| Rated voltage | 3 ACx575 V | | |
| Shut-off points | ≤620 V | | |
| Rated frequency | 10–400 Hz | | |
| Motor performance | 7.5 kW | | |
| Inverse voltage/switching current | – | | |
| Holding Capacity | – | | |
| Type of connecting lead | H07V-U 1.5 mm ² , black | | |
| Length of connecting lead (M) | 0,03 | | |
| Connecting lead | – | | |
| Termination | stripped cable ends | | |
| Fittings | – | | |
| Suppression type | Motor connection star | | |
| General | | | |
| Design | VM1 | | |
| Status indication | – | | |
| Conductor labelling | – | | |
| Housing material | PPO | | |
| IP rating | IP 67 | | |
| Pottant | 2-components | | |
| Field installation | for direct attachment to switches | | |
| Operation temperature range | -20 °C – 60 °C | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Dimensions (w x h x d) | 15.0 x 40.0 x 40.5 mm | | |
| Weight (kg/piece) | 0.015 | | |
| Standards | – | | |
| Approvals | – | | |

Suppression Technology - Motor suppression

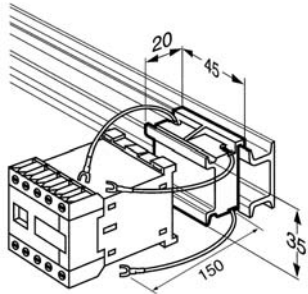
As substructure for protection types up to 45 mm wide

2.5 kW; 3 AC x 400 V

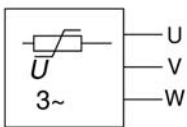
Protection device: Varistor



Dimensions



PIN assignment



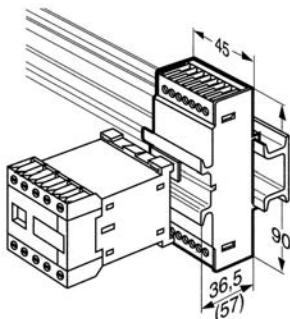
| Description | Part-No. | Type | PU |
|-----------------------------------|----------------------------|---------------|-----------------------|
| varistor | | | |
| Description | varistor | 700217 | LV-S9-0217 3 AC 400 V |
| | | | 10 |
| Technical data | | 700217 | |
| Function type | Motor suppression | | |
| Protection device | varistor | | |
| Rated voltage | 3 ACx400 V | | |
| Shut-off points | ≤860 V | | |
| Rated frequency | 10–400 Hz | | |
| Motor performance | 2.5 kW | | |
| Inverse voltage/switching current | – | | |
| Holding Capacity | – | | |
| Type of connecting lead | H05V-K 1.0 mm ² | | |
| Length of connecting lead (M) | 0,15 | | |
| Connecting lead | – | | |
| Termination | Fork-type cable lug M4 | | |
| Fittings | – | | |
| Suppression type | Motor connection star | | |
| General | | | |
| Design | S9 | | |
| Status indication | – | | |
| Conductor labelling | – | | |
| Housing material | Lexan | | |
| IP rating | IP 20 | | |
| Pottant | – | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Operation temperature range | -20 °C – 60 °C | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Dimensions (w x h x d) | 40.0 x 20.0 x 35.0 mm | | |
| Weight (kg/piece) | 0.036 | | |
| Standards | – | | |
| Approvals | – | | |

Suppression Technology - Motor suppression

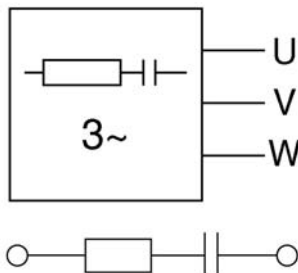
As substructure for protection types up to 45 mm wide
up to 15 kW; 3 AC x 5000 V
Protection device: RC module



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|------------------|--------|------------------------|----|
| Description | RC module 4 kW | 700180 | LRC-UC-0180 3 AC 400 V | 10 |
| | RC module 4 kW | 700190 | LRC-UC-0190 3 AC 500 V | 10 |
| | RC module 7.5 kW | 700181 | LRC-UC-0181 3 AC 400 V | 10 |
| | RC module 7.5 kW | 700191 | LRC-UC-0191 3 AC 500 V | 10 |
| | RC module 15 kW | 700182 | LRC-UC-0182 3 AC 400 V | 10 |
| | RC module 15 kW | 700192 | LRC-UC-0192 3 AC 500 V | 10 |

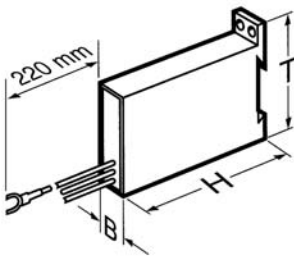
| Technical data | 700180 | 700190 | 700181 | 700191 | 700182 | 700192 |
|-----------------------------------|-------------------------------------|------------|------------|------------|------------|------------|
| Function type | Motor suppression | | | | | |
| Protection device | RC module | | | | | |
| Rated voltage | 3 ACx400 V | 3 ACx500 V | 3 ACx400 V | 3 ACx500 V | 3 ACx400 V | 3 ACx500 V |
| Shut-off points | - | | | | | |
| Rated frequency | 50-60 Hz | | | | | |
| Motor performance | 4 kW | | 7.5 kW | | 15 kW | |
| Inverse voltage/switching current | - | | | | | |
| Holding Capacity | - | | | | | |
| Type of connecting lead | H05V-K 1.0 mm ² | | | | | |
| Length of connecting lead (M) | 0,2 | | | | | |
| Connecting lead | - | | | | | |
| Termination | 3 wires with fork-type cable lug M4 | | | | | |
| Fittings | - | | | | | |
| Suppression type | - | | | | | |
| General | | | | | | |
| Design | UC | | | | | |
| Status indication | - | | | | | |
| Conductor labelling | - | | | | | |
| Housing material | PC | | | | | |
| IP rating | IP 20 | | | | | |
| Pottant | - | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | |
| Operation temperature range | -20 °C – 60 °C | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Dimensions (w x h x d) | 40.0 x 36.5 x 90.0 mm | | | | | |
| Weight (kg/piece) | 0.088 | 0.086 | 0.110 | | 0.120 | |
| Standards | - | | | | | |
| Approvals | - | | | | | |

Suppression Technology - Motor suppression

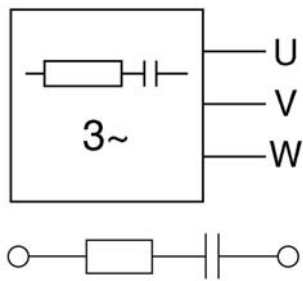
Motor suppression in the M1, M2 and M3 enclosure
for AC motors up to 30 kW; 3 AC x 400 V
Protection device: RC module



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|------------------|--------|------------------------|----|
| Description | RC module 4 kW | 700480 | LRC-M1-0480 3 AC 400 V | 10 |
| | RC module 7.5 kW | 700481 | LRC-M2-0481 3 AC 400 V | 10 |
| | RC module 15 kW | 700482 | LRC-M2-0482 3 AC 400 V | 10 |
| | RC module 30 kW | 700483 | LRC-M3-0483 3 AC 400 V | 10 |

| Technical data | 700480 | 700481 | 700482 | 700483 |
|-----------------------------------|----------------------------|--------|--------|--------|
| Function type | Motor suppression | | | |
| Protection device | RC module | | | |
| Rated voltage | 3 ACx400 V | | | |
| Shut-off points | - | | | |
| Rated frequency | 50-60 Hz | | | |
| Motor performance | 4 kW | 7.5 kW | 15 kW | 30 kW |
| Inverse voltage/switching current | - | | | |
| Holding Capacity | - | | | |
| Type of connecting lead | H05V-K 1.0 mm ² | | | |
| Length of connecting lead (M) | 0,22 | | | |
| Connecting lead | - | | | |
| Termination | Fork-type cable lug M4 | | | |
| Fittings | - | | | |
| Suppression type | Motor connection delta | | | |

| General | M1 | M2 | M3 |
|-----------------------------|---|-----------------------|-----------------------|
| Design | M1 | M2 | M3 |
| Status indication | - | | |
| Conductor labelling | - | | |
| Housing material | Noryl | | |
| IP rating | IP 67 | | |
| Pottant | 2-components | | |
| Field installation | with mounting hole M4 or attachable to TS 35 (EN 50022) with 2 snap-on sockets each | | |
| Operation temperature range | -20 °C – 60 °C | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Dimensions (w x h x d) | 15.0 x 70.0 x 48.0 mm | 20.0 x 80.0 x 58.0 mm | 25.0 x 90.0 x 58.0 mm |
| Weight (kg/piece) | 0.063 | 0.112 | 0.121 |
| Standards | - | | |
| Approvals | - | | |

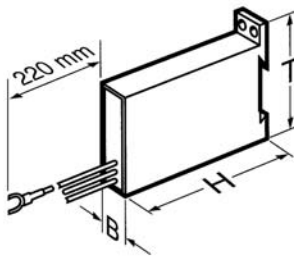
| Accessories | Colour | Article number | Description | Pkg. units |
|-------------------------------------|--------|----------------|---|------------|
| Snap-on socket for hat profile TS35 | | 700499 | Socket for attaching of the suppressor module to hat profile TS35 (EN 50022) or G-rails | 10 |

Suppression Technology - Motor suppression

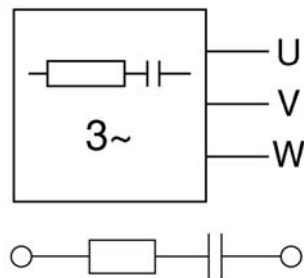
Motor suppression in the M1, M2 and M3 enclosure
for AC motors up to 30 kW; 3 AC x 500 V
Protection device: RC module



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|------------------|--------|------------------------|----|
| Description | RC module 4 kW | 700490 | LRC-M1-0490 3 AC 500 V | 10 |
| | RC module 7.5 kW | 700491 | LRC-M2-0491 3 AC 500 V | 10 |
| | RC module 15 kW | 700492 | LRC-M2-0492 3 AC 500 V | 10 |
| | RC module 30 kW | 700493 | LRC-M3-0493 3 AC 500 V | 10 |

| Technical data | 700490 | 700491 | 700492 | 700493 |
|-------------------------------------|---|-----------------------|---|-------------------|
| Function type | Motor suppression | | | |
| Protection device | RC module | | | |
| Rated voltage | 3 ACx500 V | | | |
| Shut-off points | - | | | |
| Rated frequency | 50-60 Hz | | | |
| Motor performance | 4 kW | 7.5 kW | 15 kW | 30 kW |
| Inverse voltage/switching current | - | | | |
| Holding Capacity | - | | | |
| Type of connecting lead | H05V-K 1.0 mm ² | | | |
| Length of connecting lead (M) | 0,22 | | | |
| Connecting lead | - | | | |
| Termination | Fork-type cable lug M4 | | | |
| Fittings | - | | | |
| Suppression type | Motor connection delta | | | |
| General | | | | |
| Design | M1 | M2 | M3 | |
| Status indication | - | | | |
| Conductor labelling | - | | | |
| Housing material | Noryl | | | |
| IP rating | IP 67 | | | |
| Pottant | 2-components | | | |
| Field installation | with mounting hole M4 or attachable to TS 35 (EN 50022) with 2 snap-on sockets each | | | |
| Operation temperature range | -20 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Dimensions (w x h x d) | 15.0 x 70.0 x 48.0 mm | 20.0 x 80.0 x 58.0 mm | 25.0 x 90.0 x 58.0 mm | |
| Weight (kg/piece) | 0.066 | 0.112 | 0.119 | 0.120 |
| Standards | - | | | |
| Approvals | - | | | |
| Accessories | Colour | Article number | Description | Pkg. units |
| Snap-on socket for hat profile TS35 | | 700499 | Socket for attaching of the suppressor module to hat profile TS35 (EN 50022) or G-rails | 10 |

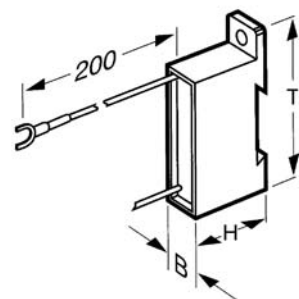
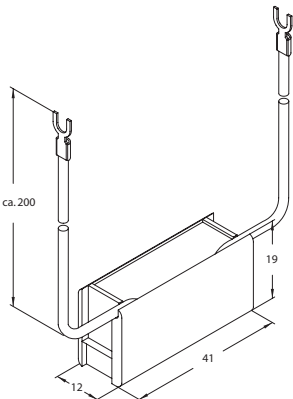
Suppression Technology - Components with special function

Adjustable switch-on delays, time range 0.5 s - 20 s

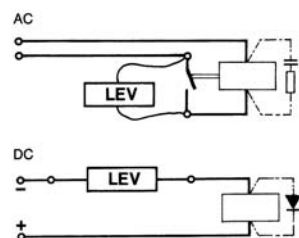
Enclosure type: S2, V1
for AC and DC operation



Dimensions



PIN assignment



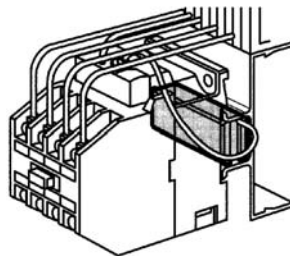
| Description | Part-No. | Type | PU | |
|---------------|----------------|--------|----------------------------|----|
| Rated voltage | AC/DC 24–230 V | 700527 | LEV-S2-0527 AC/DC 24-230 V | 10 |
| | AC/DC 24–230 V | 700529 | LEV-V1-0529 AC/DC 24-230 V | 10 |

| Technical data | 700527 | 700529 |
|-------------------------------|--|--|
| Function type | Switch-on delay | |
| Protection device | – | |
| Rated voltage | AC/DC 24–230 V | |
| Rated frequency | 50 Hz | |
| Rated current | 800.0 mA | |
| Inrush current | 10 A for 10 ms | |
| Voltage trim range | 0.5 s–20 s over potentiometer | |
| Repeat accuracy | <15 % | |
| Type of connecting lead | PVC 0.5 mm ² | |
| Length of connecting lead (M) | 0,2 | |
| Connecting lead | – | |
| Termination | Fork-type cable lug M4 | |
| General | | |
| Design | S2 | V1 |
| Pottant | 2-components | |
| Housing material | Noryl | |
| IP rating | IP 20 | |
| Field installation | insertable in top hat rail or with retaining clips (accessory) | with mounting hole M4 or attachable to hat profile TS 35 with snap-on socket (accessory) |
| Operation temperature range | -20 °C – 60 °C | |
| Storage temperature range | -40 °C – 90 °C | |
| Dimensions (w x h x d) | 41.0 x 19.0 x 12.0 mm | 12.5 x 48.0 x 25.0 mm |
| Weight (kg/piece) | 0.016 | 0.020 |
| Standards | – | |
| Approvals | – | |

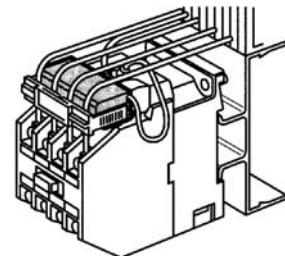
| Accessories | Colour | Article number | Description | Pkg. units |
|-------------------------------------|-------------|----------------|---|------------|
| Snap-on socket for hat profile TS35 | | 700499 | Socket for attaching of the suppressor module to hat profile TS35 (EN 50022) or G-rails | 10 |
| Retaining clip for type S2 | transparent | 700419 | For the mounting of the suppressor module to the connection wires | 10 |

Comments

Mounting diagram



Mounting diagram

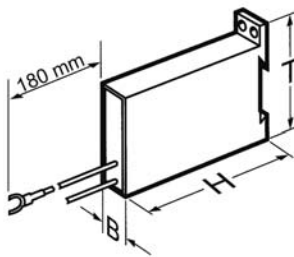


Suppression Technology - Components with special function

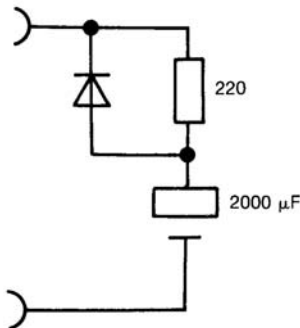
Switch-off delay Enclosure type: M3 DC - Operation



Dimensions

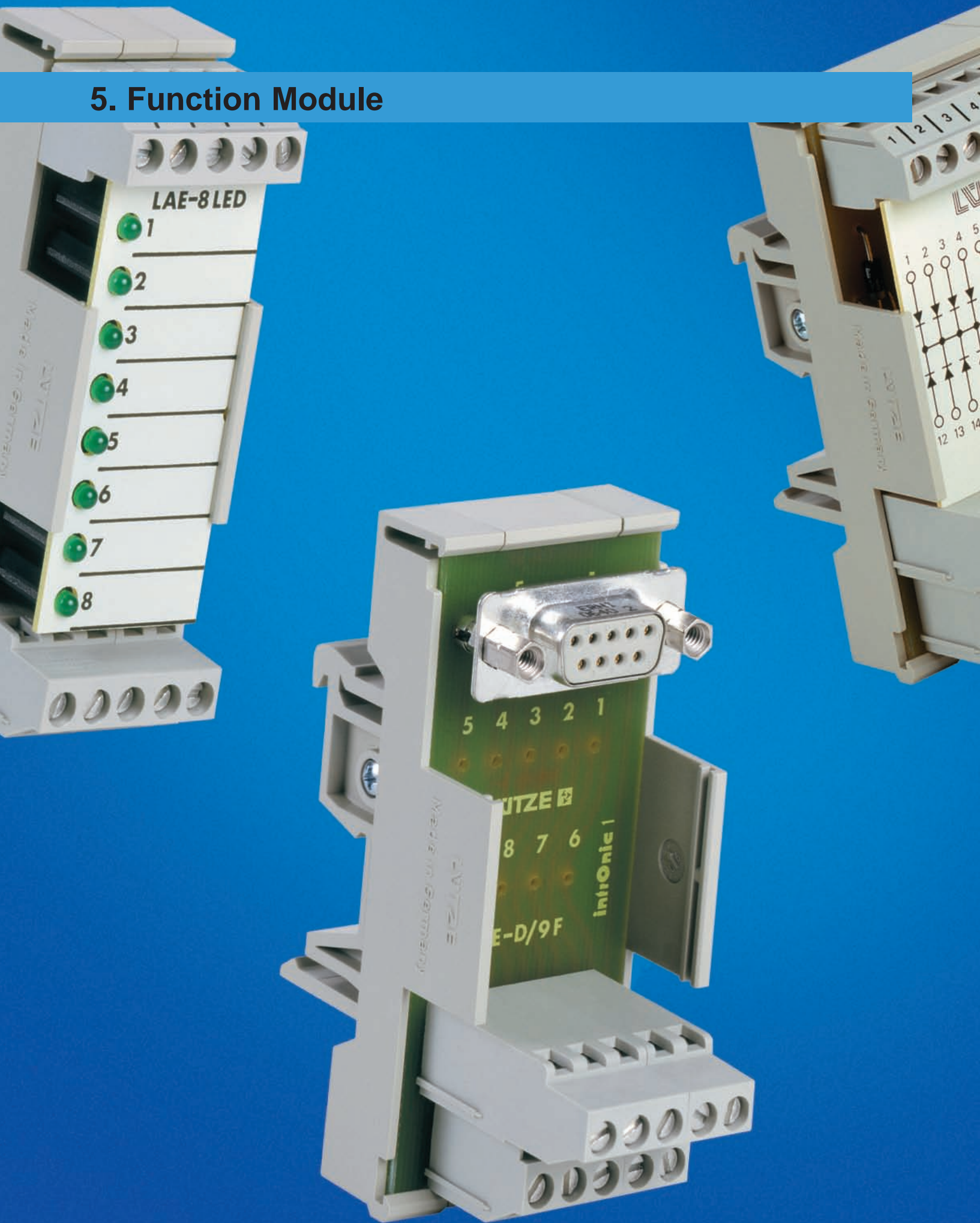


PIN assignment



| Description | Part-No. | Type | PU | |
|-------------------------------|--|---------------|---------------------|----|
| Rated voltage | DC 24 V | 703527 | LAV-M3-3527 DC 24 V | 10 |
| Technical data | | 703527 | | |
| Function type | Switch-off delay | | | |
| Protection device | - | | | |
| Rated voltage | DC 24 V | | | |
| Rated frequency | - | | | |
| Rated current | - mA | | | |
| Inrush current | - | | | |
| Voltage trim range | depending on the coil capacity | | | |
| Repeat accuracy | - | | | |
| Type of connecting lead | PVC 0.5 mm ² | | | |
| Length of connecting lead (M) | 0,18 | | | |
| Connecting lead | - | | | |
| Termination | Fork-type cable lug M4 | | | |
| General | | | | |
| Design | M3 | | | |
| Pottant | - | | | |
| Housing material | Noryl | | | |
| IP rating | IP 20 | | | |
| Field installation | with mounting hole M4 or attachable to hat profile TS 35 with snap-on socket (accessory) | | | |
| Operation temperature range | -20 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Dimensions (w x h x d) | 25.0 x 58.0 x 90.0 mm | | | |
| Weight (kg/piece) | 0.074 | | | |
| Standards | - | | | |
| Approvals | - | | | |
| Comments | | | | |

5. Function Module



Suppression Technology · Overview Function Module



Display Module



Diodes, diode gates and lamp test module



Mounting module



Potentiometer module



Transfer module to SUB-D



Transfer module to ribbon cable

Function module

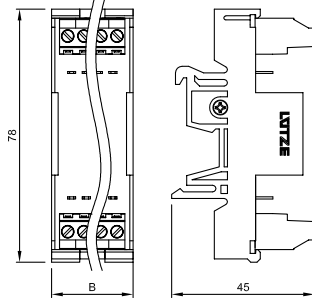
| Module | | | | | | | | | Rated voltage | | | | Connection | | Page |
|----------|---------|------------|-----------|----------|----------------|--------------------------|------------------------|--------------------------|---------------|---------|------------|------------|----------------|-----------------|------|
| Display- | Diodes- | Diode gate | Lamp test | Montage- | Potentiometer- | Transfer to SUB-D-female | Transfer to SUB-D-male | Transfer to Ribbon cable | DC 24V | DC 250V | AC/DC 125V | AC/DC 250V | Screw terminal | Spring terminal | |
| • | | | | | | | | | • | | | | • | | 5.7 |
| | • | | | | | | | | | | | • | • | | 5.5 |
| | | • | | | | | | | | | | • | • | | 5.6 |
| | | | • | | | | | | • | | | | • | | 5.8 |
| | | | | • | | | | | | | | • | • | • | 5.3 |
| | | | | | • | | | | | | | • | • | | 5.4 |
| | | | | | | • | | | | | • | | • | | 5.9 |
| | | | | | | | • | | | | • | | • | | 5.10 |
| | | | | | | | | • | | | • | | • | | 5.11 |

Function module - Varioprint Mounting Module

Mounting module with soldering terminals for free component fitting of assembly parts
 AC/DC 250 V; 4A
 Screw-/Spring terminal

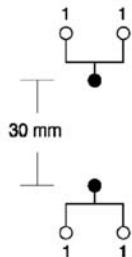


Dimensions

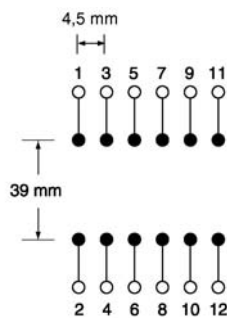


PIN assignment

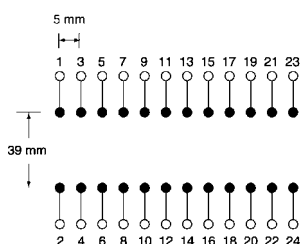
716118



710620, 710626, 710828



710663, 710664



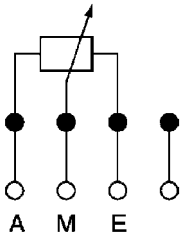
| Description | Part-No. | Type | PU | | | |
|-------------------------------------|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Screw terminal | | | | | | |
| Number of solder lugs | 2 | 716118 | MPE-1-6118 | 5 | | |
| | 6 | 710620 | MPE-3-0620 | 5 | | |
| | 12 | 710626 | MPE-6-0626 | 5 | | |
| | 18 | 710828 | MPE-9-0828 | 2 | | |
| | 24 | 710663 | MPE-12-0663 | 5 | | |
| | 30 | 710664 | MPE-15-0664 | 5 | | |
| Spring terminal | | | | | | |
| Number of solder lugs | 2 | 716112 | MPE-1-6112 | 5 | | |
| Technical data | | | | | | |
| | 2 | 6 | 12 | 18 | 24 | 30 |
| Function type | Subplate | | | | | |
| Pin spacing | – mm | | 4,5 mm | | 5 mm | |
| Rated voltage | AC/DC 250 V | | | | | |
| Rated current | 4 A | | | | | |
| Rated insulation voltage (EN 40178) | 300 V | | | | | |
| Pollution degree | 2 | | | | | |
| Overvoltage category | I | | | | | |
| General | | | | | | |
| Housing material | PPE | | | | | |
| IP rating | IP 00 | | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | | |
| Operation temperature range | -25 °C – 70 °C | | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | | |
| Dimensions (w x h x d) | 12.2 x 78.0 x 48.0 mm | 17.5 x 78.0 x 45.0 mm | 35.0 x 78.0 x 45.0 mm | 45.0 x 78.0 x 45.0 mm | 65.0 x 78.0 x 45.0 mm | 80.0 x 78.0 x 45.0 mm |
| Weight (kg/piece) | 0.020 | 0.028 | 0.048 | 0.068 | 0.095 | 0.125 |
| Approvals | – | | | | | |
| Termination | Screw terminal: 0.08–2.5 mm ² | | | | | |

Function module - Varioprint potentiometer module

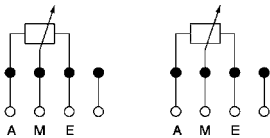
Module for free component fitting of potentiometers
 Versions in single, double or triple design
 Screw terminal



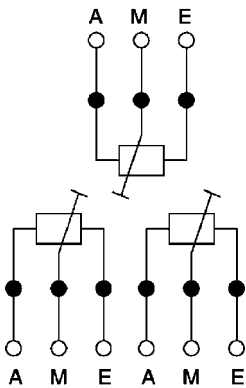
PIN assignment
 716006



710842



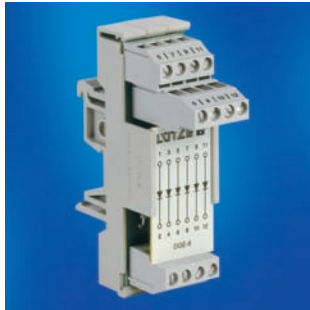
710840



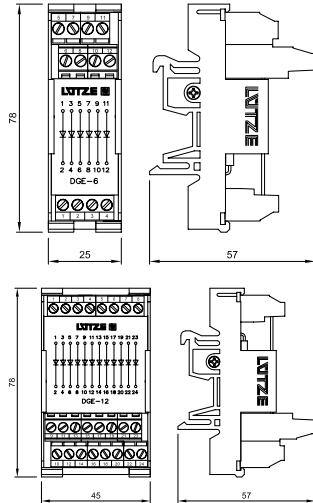
| Description | Part-No. | Type | PU | |
|-------------------------------------|--|-----------------------|-----------------------|---|
| Screw terminal | | | | |
| Number of potentiometer | 1 | 716006 | PTS-1-6006 | 5 |
| | 2 | 710842 | PTS-2-0842 | 2 |
| | 3 | 710840 | PTS-3-0840 | 2 |
| Technical data | | | | |
| | 716006 | 710842 | 710840 | |
| Number of potentiometer | 1 | 2 | 3 | |
| Function type | Mounting Module | | | |
| Diameter of mounting hole | 10 mm | | 6.5 mm | |
| Rated voltage | AC/DC 250 V | | | |
| Rated current | 1 A | | | |
| Rated insulation voltage (EN 40178) | 300 V | | | |
| Pollution degree | 2 | | | |
| Overvoltage category | I | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 00 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Operation temperature range | -25 °C – 70 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 35.0 x 77.0 x 45.0 mm | 90.0 x 77.0 x 55.0 mm | 62.5 x 77.0 x 50.0 mm | |
| Weight (kg/piece) | 0.058 | 0.078 | 0.044 | |
| Approvals | - | | | |
| Termination | Screw terminal 0.5–2.5 mm ² | | | |

Function module - Varioprint Diode Module

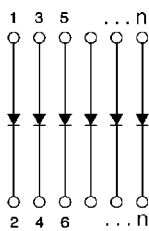
Module fitted with freely switchable diodes
 AC/DC 250 V; 1 A / 3 A
 Screw terminal



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|------------------|-------------|--------|-------------------|---|
| Number of diodes | 6 with 1 A | 710665 | DGE-6-1A/1600 V | 5 |
| | 12 with 1 A | 710802 | DGE-12-1 A/1600 V | 2 |
| | 12 with 3 A | 710804 | DGE-12-3A/1000 V | 2 |

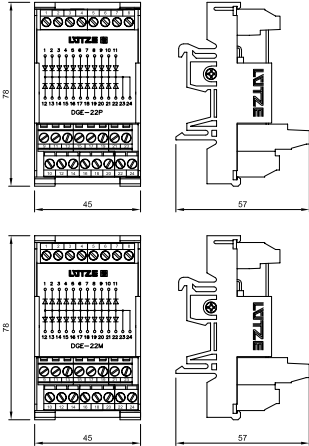
| Technical data | 710665 | 710802 | 710804 | |
|-------------------------------------|--|-----------------------|--------------------|-------------------|
| Function type | Diode gate | | | |
| Diameter of mounting hole | – mm | | | |
| Rated voltage | AC/DC 250 V | | | |
| Rated current (at U_N) | 1 A | 3 A | | |
| Rated insulation voltage (EN 50178) | 300 V | | | |
| Pollution degree | 2 | | | |
| Overvoltage category | I | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 00 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 25.0 x 77.0 x 57.0 mm | 45.0 x 77.0 x 57.0 mm | | |
| Weight (kg/piece) | 0.042 | 0.088 | 0.096 | |
| Standards | – | | | |
| Approvals | – | | | |
| Termination | screw terminal 0.5–2.5 mm ² | | | |
| Accessories | Colour | Article number | Description | Pkg. units |
| Identification unit | | 710799 | | 100 |

Function module - Varioprint Diode Module

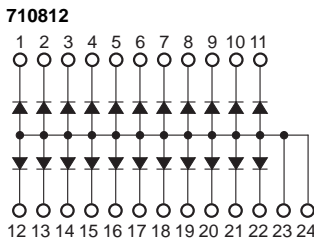
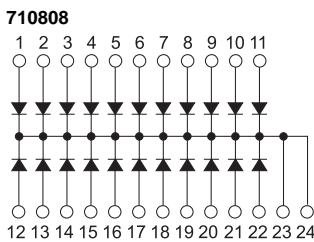
Diode module with common reference point
common cathode / anode
Screw terminal



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|------------------|--------------------|--------|--------------|---|
| Number of diodes | 22, common cathode | 710808 | DGE-22P-0808 | 2 |
| | 22, common anode | 710812 | DGE-22M-0812 | 2 |

| Technical data | 710808 | 710812 |
|-------------------------------------|--------|-------------|
| Function type | | Diode gate |
| Diameter of mounting hole | | – mm |
| Rated voltage | | AC/DC 250 V |
| Rated current (at U_N) | | 1 A |
| Rated insulation voltage (EN 50178) | | 300 V |
| Pollution degree | | 2 |
| Overvoltage category | | I |

| General | | | |
|-----------------------------|--|--|----------------|
| Housing material | PPE | | |
| IP rating | IP 00 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Operation temperature range | -20 °C – 60 °C | | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 80 °C | | |
| Dimensions (w x h x d) | 45.0 x 77.0 x 57.0 mm | | |
| Weight (kg/piece) | 0.092 | | |
| Standards | – | | |
| Approvals | – | | |
| Termination | screw terminal 0.5–2.5 mm ² | | |

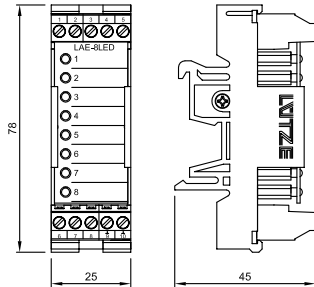
| Accessories | Colour | Article number | Description | Pkg. units |
|---------------------|--------|----------------|-------------|------------|
| Identification unit | | 710799 | | 100 |

Function module - Varioprint display module

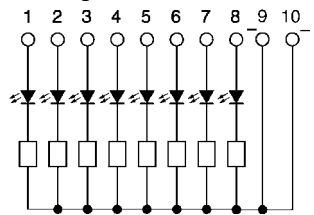
Display module with 8 LEDs for the free wiring
 Integrated series resistor, common ground potential
 Screw terminal



Dimensions



PIN assignment



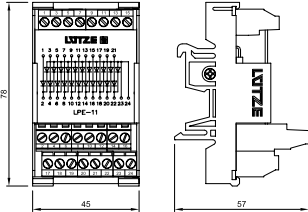
| Description | Part-No. | Type | PU | |
|-------------------------------------|--|-----------------------|--------------------|-------------------|
| Number of diodes | 8 | 710817 | LAE-8-0817 | 2 |
| Technical data | | 710817 | | |
| Function type | Display module | | | |
| Diameter of mounting hole | 3 mm | | | |
| Rated voltage | DC 24 V | | | |
| Rated current (at U _N) | 0.01 A | | | |
| Rated insulation voltage (EN 50178) | 50 V | | | |
| Pollution degree | 2 | | | |
| Overvoltage category | I | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 00 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 25.0 x 77.0 x 57.0 mm | | | |
| Weight (kg/piece) | 0.048 | | | |
| Standards | - | | | |
| Approvals | - | | | |
| Termination | screw terminal 0.5–2.5 mm ² | | | |
| Accessories | Colour | Article number | Description | Pkg. units |
| Identification unit | | 710799 | | 100 |

Function module - Varioprint lamp test module

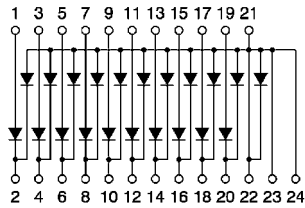
Lamp test module for 11 lamps Integrated diode gate Screw terminal



Dimensions



PIN assignment



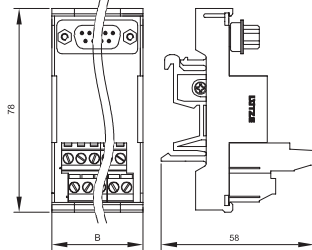
| Description | Part-No. | Type | PU | | |
|-------------------------------------|---|---------------|-----------------------|--------------------|-------------------|
| Number of diodes | 22 | 710814 | LPE-11-0814 | 2 | |
| Technical data | | 710814 | | | |
| Function type | Lamp test gate | | | | |
| Diameter of mounting hole | 3 mm | | | | |
| Rated voltage | DC 24 V | | | | |
| Rated current (at U_N) | 1 A | | | | |
| Rated insulation voltage (EN 50178) | 300 V | | | | |
| Pollution degree | 2 | | | | |
| Overvoltage category | I | | | | |
| General | | | | | |
| Housing material | PPE | | | | |
| IP rating | IP 00 | | | | |
| Field installation | rail TS 35 (EN 50022) | | | | |
| Operation temperature range | -25 °C – 60 °C | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | |
| Dimensions (w x h x d) | 45.0 x 77.0 x 57.0 mm | | | | |
| Weight (kg/piece) | 0.092 | | | | |
| Standards | - | | | | |
| Approvals | - | | | | |
| Termination | Screw terminal: single-wire up to 4 mm ² fine-strand up to 2.5 mm ² | | | | |
| Accessories | | Colour | Article number | Description | Pkg. units |
| Identification unit | | | 710799 | | 100 |

Function module - Varioprint Interface Module

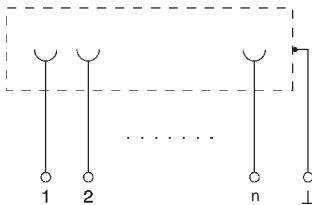
Interface module for subminiature D multipoint connector (female) according to DIN 41652
 9-, 15-, 25- and 37-pole styles
 Screw terminal



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|---|----------|--------|------------|---|
| Interface Module with connectors | | | | |
| Number of terminations | 9 | 711846 | UBE-D-1846 | 2 |
| | 15 | 711854 | UBE-D-1854 | 2 |
| | 25 | 711860 | UBE-D-1860 | 5 |
| | 37 | 711872 | UBE-D-1872 | 5 |

| Technical data | 711846 | 711854 | 711860 | 711872 |
|-------------------------------------|--|-----------------|-----------------|------------------|
| Function type | Interface Module | | | |
| Number of terminations | 9 | 15 | 25 | 37 |
| Plug | Sub-D female according to DIN 41652 | | | |
| Rated voltage | AC/DC 125 V | | | |
| Rated current | 1 | | | |
| Rated insulation voltage (EN 40178) | 150 V | | | |
| Pollution degree | 2 | | | |
| Overvoltage category | I | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 00 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 35 x 78 x 58 mm | 45 x 78 x 58 mm | 70 x 78 x 58 mm | 100 x 78 x 58 mm |
| Weight (kg/piece) | 0.058 | 0.080 | 0.118 | 0.170 |
| Approvals | - | | | |
| Termination | screw terminal 0.5–2.5 mm ² | | | |

Comments

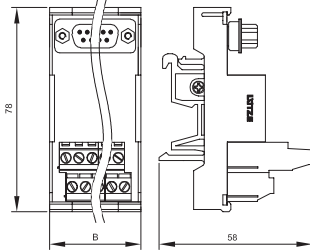
Designs with soldering terminals are available on request!

Function module - Varioprint Interface Module

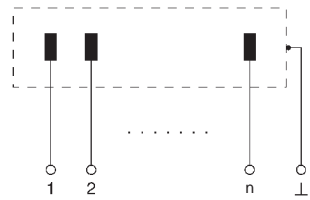
Interface module for subminiature D multipin connector according to DIN 41652
 9-, 15-, 25- and 37-pole styles
 Screw terminal



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|--|----------|--------|------------|---|
| Interface module with pin strip | | | | |
| Number of terminations | 9 | 711844 | UBE-D-1844 | 2 |
| | 15 | 711852 | UBE-D-1852 | 2 |
| | 25 | 711834 | UBE-D-1834 | 5 |
| | 37 | 711870 | UBE-D-1870 | 5 |

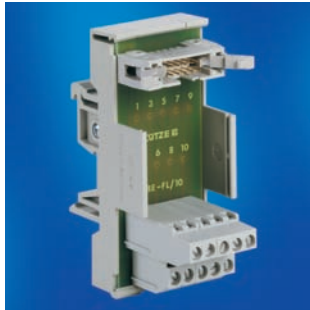
| Technical data | 711844 | 711852 | 711834 | 711870 |
|-------------------------------------|--|-----------------|-----------------|------------------|
| Function type | Interface Module | | | |
| Number of terminations | 9 | 15 | 25 | 37 |
| Plug | Sub-D pin strip according to DIN 41652 | | | |
| Rated voltage | AC/DC 125 V | | | |
| Rated current | 1 | | | |
| Rated insulation voltage (EN 40178) | 150 V | | | |
| Pollution degree | 2 | | | |
| Overvoltage category | I | | | |
| General | | | | |
| Housing material | PPE | | | |
| IP rating | IP 00 | | | |
| Field installation | rail TS 35 (EN 50022) | | | |
| Operation temperature range | -25 °C – 60 °C | | | |
| Storage temperature range | -40 °C – 80 °C | | | |
| Dimensions (w x h x d) | 35 x 78 x 58 mm | 45 x 78 x 58 mm | 70 x 78 x 58 mm | 100 x 78 x 58 mm |
| Weight (kg/piece) | 0.058 | 0.080 | 0.118 | 0.170 |
| Approvals | - | | | |
| Termination | screw terminal 0.5–2.5 mm ² | | | |

Comments

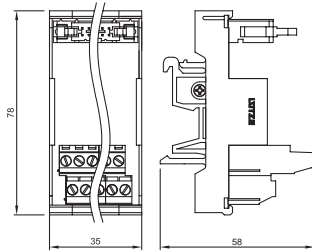
Designs with soldering terminals are available on request!

Function module - Varioprint Interface Module

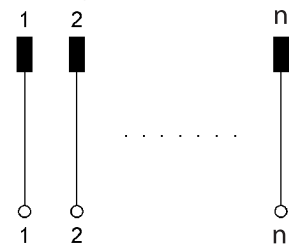
Interface module for flat cable multi-pin connector according to DIN 41651
 10-, 14-, 16-, 20-, 26-, 34-, 40-, 50-, 60- and 64-pole styles
 Screw terminal



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|---------------------------------------|----------|--------|-------------|---|
| Flat cable multi-pin connector | | | | |
| Number of terminations | 10 | 711848 | UBE-FL-1848 | 2 |
| | 14 | 711850 | UBE-FL-1850 | 2 |
| | 16 | 711856 | UBE-FL-1856 | 2 |
| | 20 | 711830 | UBE-FL-1830 | 2 |
| | 26 | 711862 | UBE-FL-1862 | 5 |
| | 40 | 711832 | UBE-FL-1832 | 2 |
| | 34 | 711868 | UBE-FL-1868 | 5 |
| | 50 | 711877 | UBE-FL-1877 | 2 |
| | 60 | 711883 | UBE-FL-1883 | 2 |
| | 64 | 711885 | UBE-FL-1885 | 2 |

Technical data

| | |
|-------------------------------------|--|
| Function type | Interface Module |
| Plug | Sub-D pin strip according to DIN 41652 |
| Rated voltage | AC/DC 125 V |
| Rated current | 1 |
| Rated insulation voltage (EN 40178) | 150 V |
| Pollution degree | 2 |
| Overvoltage category | I |

General

| | |
|-----------------------------|-----------------------|
| Housing material | PPE |
| IP rating | IP 00 |
| Field installation | rail TS 35 (EN 50022) |
| Operation temperature range | -25 °C – 60 °C |
| Storage temperature range | -40 °C – 80 °C |

Approvals

Termination screw terminal 0.5–2.5 mm²

| | | | | | |
|------------------------|-------------------|-----------------|-----------------|-----------------|------|
| Number of terminations | 10 | 14 | 16 | 20 | – |
| Dimensions (w x h x d) | 35 x | 40 x | 45 x | 55 x | – |
| | 78 x | 78 x | 78 x | 78 x | – |
| | 58 mm | 58 mm | 58 mm | 58 mm | – |
| | Weight (kg/piece) | 0,056 | 0,072 | 0,076 | 0,09 |
| | (kg/pi- ece) | (kg/pi- ece) | (kg/pi- ece) | (kg/pi- ece) | – |

| | | | | | |
|------------------------|-----------------|-----------------|-----------------|-----------------|---|
| Number of terminations | 26 | 34 | 40 | 50 | – |
| Dimensions (w x h x d) | 70 x | 90 x | 110 x | 130 x | – |
| | 78 x | 77 x | 77 x | 77 x | – |
| | 58 mm | 57 mm | 57 mm | 57 mm | – |
| Weight (kg/piece) | 0,11 | 0,148 | 0,172 | 0,208 | – |
| | (kg/pi- ece) | (kg/pi- ece) | (kg/pi- ece) | (kg/pi- ece) | – |

| | | | |
|------------------------|-----------------|-----------------|---|
| Number of terminations | 60 | 64 | – |
| Dimensions (w x h x d) | 154 x | 175 x | – |
| | 77 x | 77 x | – |
| | 57 mm | 57 mm | – |
| Weight (kg/piece) | 0,252 | 0,262 | – |
| | (kg/pi- ece) | (kg/pi- ece) | – |

Comments

Designs with soldering terminals are available on request!

6. Aktuator-Sensor-Interface



Aktuator-Sensor-Interface · Overview



24mm



48mm



48mm, pluggable



60mm



60mm, pluggable



M8 / M12 cable

M8- / M12-Boxen IP68

| Type | Number of Terminations | | | | | Plug-in positions | | | | | Termination | | Cable length | | Form | | | Page | | | |
|------|------------------------|-----|-------|------------|-------|-------------------|----|----|----|-----|-------------|-----------|----------------------|------|-------|------|------|------|-----------------|------|-----------------|
| | M8 | M12 | 3pole | 3pole + PE | 4pole | 4pole + PE | 4x | 6x | 8x | 10x | 12x | fix cable | fix cable rewireable | 5,0m | 10,0m | 24mm | 48mm | | 48mm, pluggable | 60mm | 60mm, pluggable |
| • | | | • | | | | • | • | • | • | | • | | • | | • | | | | | 6.5 |
| • | | | | • | | | • | • | • | • | | • | | • | • | • | | | | | 6.7 |
| • | | | • | | | | | | | | | • | | • | | | • | | | | 6.8 |
| • | | | • | | | | | | | | | • | | • | | | | • | | | 6.9 |
| | • | | • | | | | • | • | • | • | | • | | • | • | | | | • | | 6.10 |
| | • | | • | | | | • | • | • | • | | • | | • | | | | | • | | 6.12 |

Cord-Z

| Cord-Z | Termination Side 1 | | Termination Side 2 | | | Cable length | | | | | | | | | | Page | | | | | |
|--------|--------------------|----------|--------------------|----------|---------------|-----------------|---------------|-----------------|----------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | CAN | Ethernet | Interbus | Profibus | Male straight | Female straight | Male straight | Female straight | Open end | 0,3m | 0,5m | 0,6m | 0,7m | 0,8m | 1,0m | | 1,5m | 2,0m | 5,0m | 10,0m | |
| • | | | | | • | | | • | | | | | | | | | • | • | • | | 6.14 |
| • | | | | | • | | | • | | | | | | | | | • | • | • | | 6.15 |
| • | | | | | • | | | • | | | | | | | | | • | • | • | | 6.16 |
| | • | | | | • | | | • | | | | | | | | | • | • | • | | 6.17 |
| | | • | | | • | | | • | | | | | | | | | • | • | • | | 6.18 |
| | | | • | | • | | | • | | | | | | | | | • | • | • | | 6.19 |
| | | | • | | • | | | • | | | | | | | | | • | • | • | | 6.20 |
| | | | • | | • | | | • | | | | | | | | | • | • | • | | 6.21 |
| | | | • | | • | | | • | | | | | | | | | • | • | • | | 6.22 |
| | | | • | | • | | | • | | | | | | | | | • | • | • | | 6.23 |
| | | | • | | • | | | • | | | | | | | | | • | • | • | | 6.24 |

M8-M12-cables with open end

| Type | Number of Terminations | | | | | Termination | | | | | | | | | | Cable length | | | Page | | |
|------|------------------------|-----|--------|--------|--------|-------------|---------------|---------------|----------|-------------|-----------------------|-----------------|--------------------------|---------------|------------------------|------------------------|------|------|------|-------|---------|
| | M8 | M12 | 3polig | 4polig | 5polig | 8polig | Male straight | Male straight | Shielded | Male angled | Male angled geschirmt | Female straight | Female straight shielded | Female angled | Female angled shielded | Female angled with LED | 2,0m | 5,0m | | 10,0m | |
| • | | | • | | | | • | | | | | | | | | | • | • | • | | 6.25 |
| • | | | • | | | | • | | | | | | | | | | • | • | • | | 6.26 |
| • | | | • | | | | | | | | | | | | | | • | • | • | | 6.27 |
| • | | | • | | | | | | | | | | | | | | • | • | • | | 6.28 |
| • | | | • | | | | | | | | | | | | | | • | • | • | | 6.29 |
| • | | | • | | | | | | | | | | | | | | • | • | • | | 6.30 |
| • | | | • | | | | | | | | | | | | | | • | • | • | | 6.31 |
| | • | | • | | | | • | | | | | | | | | | • | • | • | | ab 6.32 |
| | • | | • | | | | | | | | | | | | | | • | • | • | | ab 6.34 |
| | • | | • | | | | | | | | | | | | | | • | • | • | | ab 6.36 |
| | • | | • | | | | | | | | | | | | | | • | • | • | | ab 6.38 |
| | • | | • | | | | | | | | | | | | | | • | • | • | | ab 6.40 |
| | • | | • | | | | | | | | | | | | | | • | • | • | | ab 6.42 |
| | • | | • | | | | | | | | | | | | | | • | • | • | | 6.44 |

Aktuator-Sensor-Interface • Overview



M8- to M8-Cables

| Termination Side 1 | | | Termination Side 2 | | | | | Number of Term. | | Cable length | | | | | | | Page |
|--------------------|------------------------|--|--------------------|--------------------------|---------------|------------------------|------------------------|-----------------|-------|--------------|------|------|------|------|------|------|------|
| Male straight | Male straight shielded | | Female straight | Female straight shielded | Female angled | Female angled shielded | Female angled with LED | 3pole | 4pole | 0,3m | 0,6m | 1,0m | 1,5m | 2,0m | 5,0m | | |
| • | | | • | | | | | • | • | • | • | • | • | • | • | 6.45 | |
| • | | | | | • | | | • | • | • | • | • | • | • | • | 6.47 | |
| • | | | | | | | • | • | • | • | • | • | • | • | • | 6.49 | |
| | • | | • | | | | | • | • | • | • | • | • | • | • | 6.46 | |
| | • | | | | • | | | • | • | • | • | • | • | • | • | 6.48 | |

M12- to M8-Cables

| Termination Side 1 | | | Termination Side 2 | | | | | Number of Term. | | Cable length | | | | | | | Page |
|--------------------|------------------------|--|--------------------|--------------------------|---------------|------------------------|------------------------|-----------------|--|--------------|------|------|------|------|------|------|------|
| Male straight | Male straight shielded | | Female straight | Female straight shielded | Female angled | Female angled shielded | Female angled with LED | 3polig | | 0,3m | 0,6m | 1,0m | 1,5m | 2,0m | 5,0m | | |
| • | | | • | | | | | • | | • | • | • | • | • | • | 6.50 | |
| • | | | | | • | | | • | | • | • | • | • | • | • | 6.51 | |
| • | | | | | | | • | • | | • | • | • | • | • | • | 6.52 | |

M12- to M12-Cables

| Termination Side 1 | | | Termination Side 2 | | | | | Number of Term. | | Cable length | | | | | | | Page | | |
|--------------------|------------------------|--|--------------------|--------------------------|---------------|------------------------|------------------------|-----------------|--------|--------------|--------|------|------|------|------|------|------|---|------|
| Male straight | Male straight shielded | | Female straight | Female straight shielded | Female angled | Female angled shielded | Female angled with LED | 3polig | 4polig | 5polig | 8polig | 0,3m | 0,6m | 1,0m | 1,5m | 2,0m | 5,0m | | |
| • | | | • | | | | | • | • | • | • | • | • | • | • | • | • | • | 6.53 |
| • | | | | | • | | | • | • | • | • | • | • | • | • | • | • | • | 6.57 |
| • | | | | | | | • | • | • | • | • | • | • | • | • | • | • | • | 6.61 |
| | • | | • | | | | | • | • | • | • | • | • | • | • | • | • | • | 6.55 |
| | • | | | | • | | | • | • | • | • | • | • | • | • | • | • | • | 6.59 |

M12- to Valve plug cables

| Termination Side 1 | | | Termination Side 2 | | | | | Number of Term. | | Cable length | | | | | | | Protection device | Page | |
|--------------------|--|--|--------------------|---------------------|---------|---------------|---------|-----------------|-------|--------------|------|------|------|------|------|--|-------------------|------|------|
| Male straight | | | A | A - Pressure switch | B - DIN | BI - Industry | C - DIN | CI - Industry | 3pole | 5pole | 0,3m | 0,6m | 1,0m | 1,5m | 2,0m | | Varistor | | |
| • | | | • | • | | | | | • | • | • | • | • | • | • | | • | | 6.62 |
| • | | | | | • | • | | | • | • | • | • | • | • | • | | • | | 6.63 |
| • | | | | | | • | • | • | • | • | • | • | • | • | • | | • | | 6.64 |

Aktuator-Sensor-Interface • Overview



Straight



Angled



Straight shielded



Panel connector with wire



Panel connector USB



Panel connector RJ45

M8- / M12-Connector

| Type | | Connection | | | | | | Number of Termination | | | | Connection | | | | Code | | | | Page |
|------|-----|---------------|-------------|------------------------|-----------------|---------------|------------------------|-----------------------|-------|-------|-------|-------------------|--------------------|--|---------|---------------|------------------------------|--------------------|------|------|
| M8 | M12 | Male straight | Male angled | Male straight shielded | Female straight | Female angled | Female angled shielded | 3pole | 4pole | 5pole | 8pole | Screw termination | Solder termination | Insulation displacement connection (IDC) | A-coded | A-coded (CAN) | B-coded (Profibus, Interbus) | D-coded (Ethernet) | | |
| • | | • | | | • | | | • | • | | | • | • | | | | | | 6.65 | |
| • | | • | | | • | | | • | • | | | • | • | | | | | | 6.66 | |
| | • | | | | | | | • | • | • | • | • | • | | • | | | | 6.68 | |
| | • | | | | | | | • | • | • | • | • | • | | • | | | | 6.67 | |
| | • | | • | | | | | • | • | • | • | • | • | | • | | | | 6.69 | |
| | • | | | • | | | | • | • | • | • | • | • | • | • | | | | 6.70 | |
| | • | | | • | | | | • | • | • | • | • | • | | • | • | | | 6.71 | |
| | • | | | • | | | | • | • | • | • | • | • | | • | | • | | 6.72 | |
| | • | | | • | | | | • | • | • | • | • | • | | • | | • | | 6.73 | |

Panel Connector

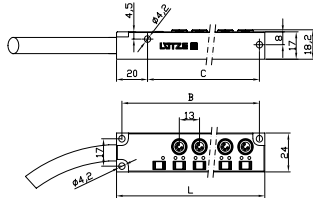
| Type | | Connection | | | | | | Number of Termination | | | | Code | | Cable length | | | | | | | | Page | |
|------|-----|------------|--------|-----------------|-----|------|-------|-----------------------|-------|-------|---------|--------------------|------|--------------|------|------|------|------|------|------|------|------|------|
| M8 | M12 | Male | Female | Female shielded | USB | RJ47 | 3pole | 4pole | 5pole | 8pole | A-coded | D-coded (Ethernet) | 0,3m | 0,5m | 0,6m | 0,8m | 1,0m | 1,5m | 2,0m | 3,0m | 5,0m | | |
| • | | • | • | | | | • | • | • | • | • | • | | • | | | | | | | | | 6.74 |
| • | | • | • | | | | • | • | • | • | • | • | | • | | | | | | | | | 6.75 |
| | • | | • | | | | • | • | • | • | • | • | | • | | | | | | | | | 6.76 |
| | • | | | • | | | • | • | • | • | • | • | | • | | | • | • | • | • | • | • | 6.77 |
| | | | | | • | | • | • | • | • | • | • | | • | • | • | • | • | • | • | • | • | 6.78 |
| | | | | | | • | • | • | • | • | • | • | | • | • | • | • | • | • | • | • | • | 6.79 |

Actuator sensor interface - M8 - Actuator sensor box IP 68

M 8 – Actuator sensor boxes – IP 68 with LED indication and connected PUR cable
4-way, 6-way, 8-way / 3-pole
c-track compatible

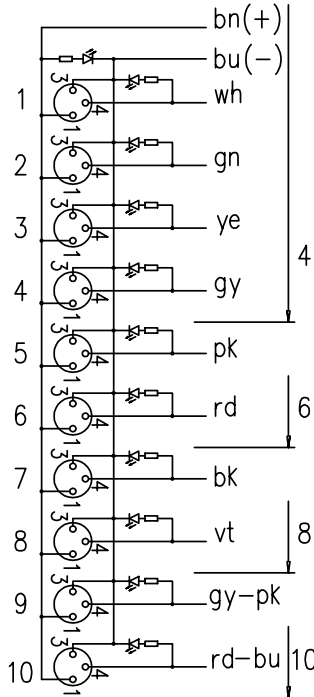


Dimensions



| | L | B ^{+0.1} _{-0.1} | C ^{+0.1} _{-0.1} |
|-------|-----|-----------------------------------|-----------------------------------|
| 4xM8 | 92 | 85 | 68,5 |
| 6xM8 | 118 | 111 | 94,5 |
| 8xM8 | 144 | 137 | 120,5 |
| 10xM8 | 170 | 163 | 146,5 |
| 12xM8 | 196 | 189 | 172,5 |

PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|----------|--------|--------------------------|---|
| Slots | 4-way | 493005 | BOX - M 8 - 3L4S 5m PUR | 5 |
| | 4-way | 493010 | BOX - M 8 - 3L4S 10m PUR | 5 |
| | 6-way | 493105 | BOX - M 8 - 3L6S 5m PUR | 5 |
| | 6-way | 493110 | BOX - M 8 - 3L6S 10m PUR | 5 |
| | 8-way | 493205 | BOX - M 8 - 3L8S 5m PUR | 5 |
| | 8-way | 493210 | BOX - M 8 - 3L8S 10m PUR | 5 |

| Technical data | 4-way, 5m | 4-way, 10m | 6-way, 5m | 6-way, 10m | 8-way, 5m | 8-way, 10m |
|--|---|------------|---------------------------------|------------|---------------------------------|------------|
| Rated voltage | DC 24 V | | | | | |
| Nominal voltage range | 10 – 30 V | | | | | |
| Rated current | max. 2A per channel | | | | | |
| Amperage range | max. total 7.5 A | | | | | |
| Number of terminations | 3-pole | | | | | |
| Slots | 4-way | | 6-way | | 8-way | |
| Cable length | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 |
| Status indication | Supply: 1 x LED green, I/O: each 1 x LED yellow | | | | | |
| Current consumption per LED | < 10mA / LED | | | | | |
| Coding | – | | | | | |
| Shielding | – | | | | | |
| General | | | | | | |
| Design | M8 x 1, connector | | | | | |
| Rated insulation voltage (EN 50178) | 32 V | | | | | |
| Test voltage | 1.0 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | > 10 ⁹ Ω | | | | | |
| Contact resistance | – | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 68, in screwed condition | | | | | |
| Housing material | PBT grey | | | | | |
| Contact material | CuZn, gold-plated | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | Viton | | | | | |
| Cable construction | 2x0.75 + 4x0.34 mm ² | | 2x0.75 + 6x0.34 mm ² | | 2x0.75 + 8x0.34 mm ² | |
| Cable jacket | PUR | | | | | |
| Conductor insulation | TPE coloured | | | | | |
| Cable diameter | 7.0 mm | | 7.2 mm | | 7.4 mm | |
| Bending radius | fixed: 4 x D, cable track: 10 x D | | | | | |
| Termination | – | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Operation temperature range | -20 °C – 80 °C | | | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Dimensions (w x h x d) | 24.0 x 18.2 x 92.0 mm | | 24.0 x 18.2 x 118.0 mm | | 24.0 x 18.2 x 144.0 mm | |
| Weight (kg/piece) | 0.620 | 1.200 | 0.680 | 1.300 | 0.740 | 1.400 |
| Approvals | UL, CSA | | | | | |

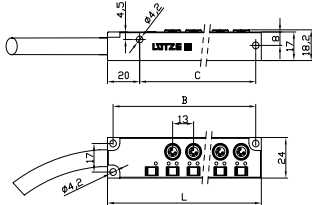
| Accessories | Article number | Type | Pkg. units |
|---------------------|----------------|-------|------------|
| Protective cover M8 | 499989 | SK M8 | 50 |

Actuator sensor interface - M8 - Actuator sensor box IP 68

M 8 – Actuator sensor boxes – IP 68 with LED indication and connected PUR cable
10-way, 12-way / 3-pole
c-track compatible

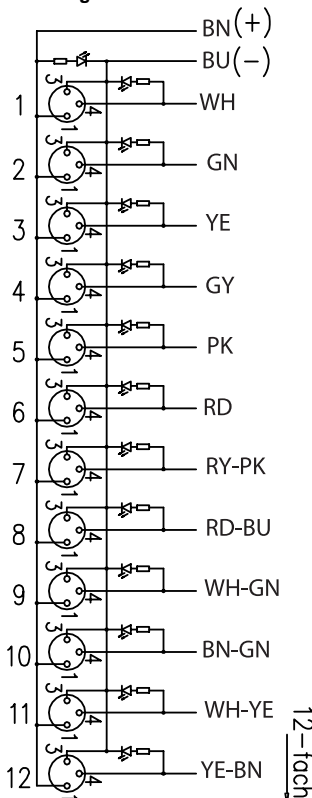


Dimensions



| | L | B ^{+0.1} / _{-0.1} | C ^{+0.1} / _{-0.1} |
|-------|-----|-------------------------------------|-------------------------------------|
| 4xM8 | 92 | 85 | 68,5 |
| 6xM8 | 118 | 111 | 94,5 |
| 8xM8 | 144 | 137 | 120,5 |
| 10xM8 | 170 | 163 | 146,5 |
| 12xM8 | 196 | 189 | 172,5 |

PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|----------|--------|---------------------------|---|
| Slots | 10-way | 493305 | BOX - M 8 - 3L10S 5m PUR | 5 |
| | 10-way | 493310 | BOX - M 8 - 3L10S 10m PUR | 5 |
| | 12-way | 493405 | BOX - M 8 - 3L12S 5m PUR | 5 |
| | 12-way | 493410 | BOX - M 8 - 3L12S 10m PUR | 5 |

| Technical data | 10-way, 5m | 10-way, 10m | 12-way, 5m | 12-way, 10m |
|--|---|-------------|----------------------------------|-------------|
| Rated voltage | DC 24 V | | | |
| Nominal voltage range | 10 – 30 V | | | |
| Rated current | max. 2A per channel | | | |
| Amperage range | max. total 7.5 A | | | |
| Number of terminations | 3-pole | | | |
| Slots | 10-way | | 12-way | |
| Cable length | 5.0 | 10.0 | 5.0 | 10.0 |
| Status indication | Supply: 1 x LED green, I/O: each 1 x LED yellow | | | |
| Current consumption per LED | < 10mA / LED | | | |
| Coding | - | | | |
| Shielding | - | | | |
| General | | | | |
| Design | M8 x 1, connector | | | |
| Rated insulation voltage (EN 50178) | 32 V | | | |
| Test voltage | 1.0 kV | | | |
| Pollution degree | 3 | | | |
| Insulation resistance | > 10 ⁹ Ω | | | |
| Contact resistance | - | | | |
| Class of flammability according to UL 94 | V0 | | | |
| IP rating | IP 68, in screwed condition | | | |
| Housing material | PBT grey | | | |
| Contact material | CuZn, gold-plated | | | |
| Thread material | CuSn nickel plated | | | |
| Gasket | Viton | | | |
| Cable construction | 2x0.75 + 10x0.34 mm ² | | 2x0.75 + 12x0.34 mm ² | |
| Cable jacket | PUR | | | |
| Conductor insulation | TPE coloured | | | |
| Cable diameter | 7.6 mm | | 7.7 mm | |
| Bending radius | fixed: 4 x D, cable track: 10 x D | | | |
| Termination | - | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Operation temperature range | -20 °C – 80 °C | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | |
| Dimensions (w x h x d) | 24.0 x 18.2 x 170.0 mm | | 24.0 x 18.2 x 196.0 mm | |
| Weight (kg/piece) | 0.810 | 1.580 | 0.830 | 1.600 |
| Approvals | UL, CSA | | | |

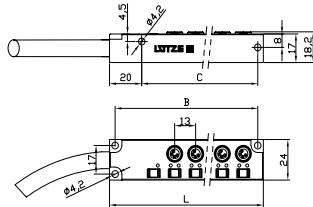
| Accessories | Article number | Type | Pkg. units |
|---------------------|----------------|-------|------------|
| Protective cover M8 | 499989 | SK M8 | 50 |

Actuator sensor interface - M8 - Actuator sensor box IP 68

M 8 – Actuator sensor boxes – IP 68 with LED indication and connected PUR cable
 4-way, 6-way, 8-way / 4-pole
 c-track compatible

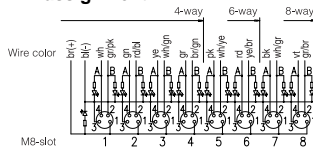


Dimensions



| | L | B ^{+0.1} _{-0.1} | C ^{+0.1} _{-0.1} |
|------|-----|-----------------------------------|-----------------------------------|
| 4xM8 | 92 | 85 | 68,5 |
| 6xM8 | 118 | 111 | 94,5 |
| 8xM8 | 144 | 137 | 120,5 |

PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|----------|--------|--------------------------|---|
| Slots | 4-way | 493505 | BOX - M 8 - 4L4S 5m PUR | 5 |
| | 4-way | 493510 | BOX - M 8 - 4L4S 10m PUR | 5 |
| | 6-way | 493605 | BOX - M 8 - 4L6S 5m PUR | 5 |
| | 6-way | 493610 | BOX - M 8 - 4L6S 10m PUR | 5 |
| | 8-way | 493705 | BOX - M 8 - 4L8S 5m PUR | 5 |
| | 8-way | 493710 | BOX - M 8 - 4L8S 10m PUR | 5 |

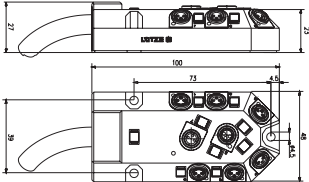
| Technical data | 4-way, 5m | 4-way, 10m | 6-way, 5m | 6-way, 10m | 8-way, 5m | 8-way, 10m |
|--|---|------------|----------------------------------|------------|----------------------------------|------------|
| Rated voltage | DC 24 V | | | | | |
| Nominal voltage range | 10 – 30 V | | | | | |
| Rated current | max. 2A per channel | | | | | |
| Amperage range | max. total 7.5 A | | | | | |
| Number of terminations | 4-pole | | | | | |
| Slots | 4-way | | 6-way | | 8-way | |
| Cable length | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 |
| Status indication | Supply: 1 x LED green, I/O: each 1 x LED yellow | | | | | |
| Current consumption per LED | < 10mA / LED | | | | | |
| Coding | – | | | | | |
| Shielding | – | | | | | |
| General | | | | | | |
| Design | M8 x 1, connector | | | | | |
| Rated insulation voltage (EN 50178) | 32 V | | | | | |
| Test voltage | 1.0 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | > 10 ⁹ Ω | | | | | |
| Contact resistance | – | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 68, in screwed condition | | | | | |
| Housing material | PBT grey | | | | | |
| Contact material | CuZn, gold-plated | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | Viton | | | | | |
| Cable construction | 2x0.75 + 8x0.34 mm ² | | 2x0.75 + 12x0.34 mm ² | | 2x0.75 + 16x0.34 mm ² | |
| Cable jacket | PUR | | | | | |
| Conductor insulation | TPE coloured | | | | | |
| Cable diameter | 7.4 mm | | 7.7 mm | | 8.5 mm | |
| Bending radius | fixed: 4 x D, cable track: 10 x D | | | | | |
| Termination | – | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Operation temperature range | -20 °C – 80 °C | | | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Dimensions (w x h x d) | 24.0 x 18.2 x 92.0 mm | | 24.0 x 18.2 x 118.0 mm | | 24.0 x 18.2 x 144.0 mm | |
| Weight (kg/piece) | 0.650 | 1.200 | 0.650 | 1.350 | 0.910 | 1.750 |
| Approvals | UL, CSA | | | | | |
| Accessories | Article number | | Type | | Pkg. units | |
| Protective cover M8 | 499989 | | SK M8 | | 50 | |

Actuator sensor interface - M8 - Actuator sensor box IP 68

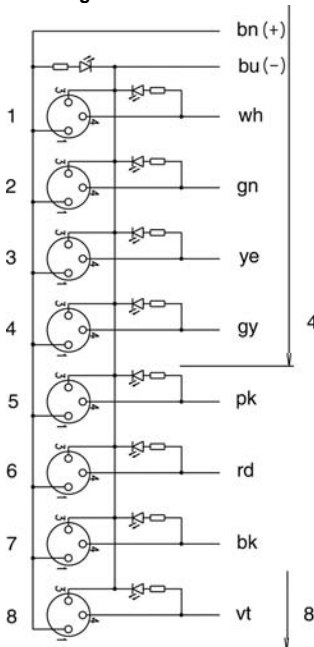
M 8 – Actuator sensor boxes – IP 68 with LED indication and connected PUR cable
 8-way / 3 pole
 c-track compatible



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|----------|--------|--------------------|---|
| Slots | 8-way | 492050 | BOX-M8 3L8 5m PUR | 5 |
| | 8-way | 492100 | BOX-M8 3L8 10m PUR | 5 |

| Technical data | 8-way, 5m | 8-way, 10m |
|--|---|---------------------|
| Rated voltage | | DC 24 V |
| Nominal voltage range | | 10 – 30 V |
| Rated current | | max. 2A per channel |
| Amperage range | | max. total 7.5 A |
| Number of terminations | | 3-pole |
| Slots | | 8-way |
| Cable length | 5.0 | 10.0 |
| Status indication | Supply: 1 x LED green, I/O: each 1 x LED yellow | |
| Current consumption per LED | < 10mA / LED | |
| Coding | – | |
| Shielding | – | |
| General | | |
| Design | M8 x 1, connector | |
| Rated insulation voltage (EN 50178) | 32 V | |
| Test voltage | 1.0 kV | |
| Pollution degree | 3 | |
| Insulation resistance | > 10 ⁹ Ω | |
| Contact resistance | – | |
| Class of flammability according to UL 94 | V0 | |
| IP rating | IP 68, in screwed condition | |
| Housing material | PBT grey | |
| Contact material | CuZn, gold-plated | |
| Thread material | CuSn nickel plated | |
| Gasket | Viton | |
| Cable construction | 2x0.75 + 8x0.34 mm ² | |
| Cable jacket | PUR | |
| Conductor insulation | TPE coloured | |
| Cable diameter | 7.4 mm | |
| Bending radius | fixed: 4 x D, cable track: 10 x D | |
| Termination | – | |
| Storage temperature range | -40 °C – 90 °C | |
| Operation temperature range | -20 °C – 80 °C | |
| Temperature range cable fixed | -40 °C – 80 °C | |
| Temperature range cable moving | -5 °C – 80 °C | |
| Dimensions (w x h x d) | 48.0 x 27.0 x 100.0 mm | |
| Weight (kg/piece) | 0.850 | 1.470 |
| Approvals | UL, CSA | |

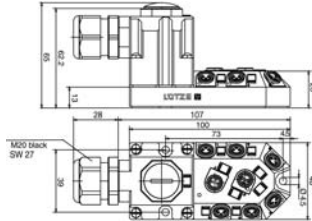
| Accessories | Article number | Type | Pkg. units |
|---------------------|----------------|-------|------------|
| Protective cover M8 | 499989 | SK M8 | 50 |

Actuator sensor interface - M8 - Actuator sensor box IP 68

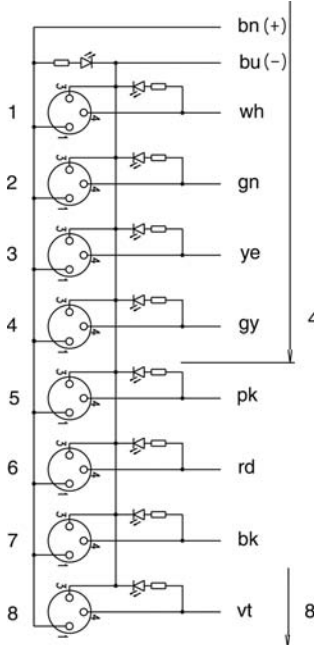
M 8 – Actuator sensor boxes – IP 68 with LED indication 8-way / 3-pole, wireable



Dimensions



PIN assignment



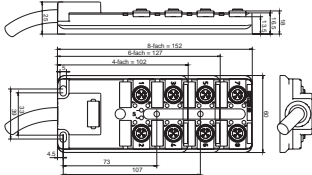
| Description | Part-No. | Type | PU |
|--|---|--------------|-------------------|
| 8-way | | | |
| Slots | 8-way | 491000 | BOX-M 8-3H8 |
| Technical data | | | |
| | | 8-way | |
| Rated voltage | DC 24 V | | |
| Nominal voltage range | 10 – 30 V | | |
| Rated current | max. 2A per channel | | |
| Amperage range | max. total 7.5 A | | |
| Number of terminations | 3-pole | | |
| Slots | 8-way | | |
| Cable length | – | | |
| Status indication | Supply: 1 x LED green, I/O: each 1 x LED yellow | | |
| Current consumption per LED | < 10mA / LED | | |
| Coding | – | | |
| Shielding | – | | |
| General | | | |
| Design | M8 x 1, connector | | |
| Rated insulation voltage (EN 50178) | 32 V | | |
| Test voltage | 1.0 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | > 10 ⁹ Ω | | |
| Contact resistance | – | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 68, in screwed condition | | |
| Housing material | PBT grey | | |
| Contact material | CuZn, gold-plated | | |
| Thread material | CuSn nickel plated | | |
| Gasket | Viton | | |
| Cable construction | – | | |
| Cable jacket | – | | |
| Conductor insulation | – | | |
| Cable diameter | 10 – 14 mm | | |
| Bending radius | – | | |
| Termination | Screw terminal: 0,08 – 1.5 mm ² | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Operation temperature range | -20 °C – 80 °C | | |
| Temperature range cable fixed | -40 °C – 80 °C | | |
| Temperature range cable moving | -5 °C – 80 °C | | |
| Dimensions (w x h x d) | 48.0 x 65.0 x 135.0 mm | | |
| Weight (kg/piece) | 0.220 | | |
| Approvals | UL, CSA | | |
| Accessories | | | |
| | Article number | Type | Pkg. units |
| Protective cover M8 | 499989 | SK M8 | 50 |

Actuator sensor interface - M12 - Actuator sensor box IP 68

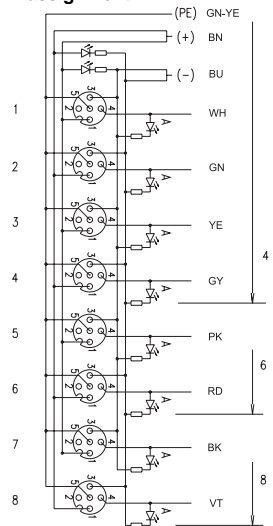
M 8 – Actuator sensor boxes – IP 68 with LED indication and connected PUR cable
4-way, 8-way / 3-pole + PE
c-track compatible



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|----------|--------|---------------------|---|
| Slots | 4-way | 400050 | BOX-M12 3L4 5m PUR | 5 |
| | 4-way | 400100 | BOX-M12 3L4 10m PUR | 5 |
| | 8-way | 402050 | BOX-M12 3L8 5m PUR | 5 |
| | 8-way | 402100 | BOX-M12 3L8 10m PUR | 5 |

| Technical data | 4-way, 5m | 4-way, 10m | 8-way, 5m | 8-way, 10m |
|--|---|------------|--------------------------------|------------|
| Rated voltage | DC 24 V | | | |
| Nominal voltage range | 10 – 30 V | | | |
| Rated current | max. 2A per channel | | | |
| Amperage range | max. total 12 A | | | |
| Number of terminations | 3-pole + PE | | | |
| Slots | 4-way | | 8-way | |
| Cable length | 5.0 | 10.0 | 5.0 | 10.0 |
| Status indication | Supply: 2 x LED green, I/O: each 1 x LED yellow | | | |
| Current consumption per LED | < 10 mA / LED | | | |
| Coding | A | | | |
| Shielding | - | | | |
| General | | | | |
| Design | M12 x 1, connector | | | |
| Rated insulation voltage (EN 50178) | 32 V | | | |
| Test voltage | 1.0 kV | | | |
| Pollution degree | 3 | | | |
| Insulation resistance | > 10 ⁹ Ω | | | |
| Contact resistance | - | | | |
| Class of flammability according to UL 94 | V0 | | | |
| IP rating | IP 68, in screwed condition | | | |
| Housing material | PBT grey | | | |
| Contact material | CuZn, gold-plated | | | |
| Thread material | CuSn nickel plated | | | |
| Gasket | Viton | | | |
| Cable construction | 3x1.0 + 4x0.34 mm ² | | 3x1.0 + 8x0.34 mm ² | |
| Cable jacket | PUR | | | |
| Conductor insulation | TPE coloured | | | |
| Cable diameter | 7.5 mm | | 8.2 mm | |
| Bending radius | fixed: 4 x D, cable track: 10 x D | | | |
| Termination | - | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Operation temperature range | -20 °C – 80 °C | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | |
| Dimensions (w x h x d) | 60.0 x 25.0 x 102.0 mm | | 60.0 x 25.0 x 152.0 mm | |
| Weight (kg/piece) | 0.860 | 1.560 | 1.160 | 1.940 |

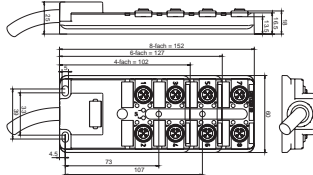
| Approvals | | | |
|---------------------------|----------------|---------------------|------------|
| UL, CSA | | | |
| Accessories | Article number | Type | Pkg. units |
| protective cover M12 | 499994 | SK M12 | 50 |
| T-junction M12 on 2 x M12 | 490026 | T-connector M12/M12 | 10 |
| T-junction M12 on 2 x M8 | 490038 | T-connector M12/M8 | 10 |

Actuator sensor interface - M12 - Actuator sensor box IP 68

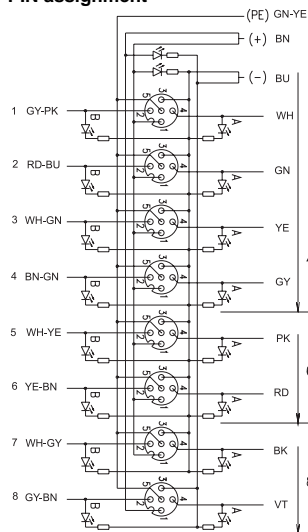
M 8 – Actuator sensor boxes – IP 68 with LED indication and connected PUR cable
4-way, 8-way / 4-pole + PE
c-track compatible



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|----------|--------|---------------------|---|
| Slots | 4-way | 407050 | BOX-M12 4L4 5m PUR | 5 |
| | 4-way | 407100 | BOX-M12 4L4 10m PUR | 5 |
| | 8-way | 409050 | BOX-M12 4L8 5m PUR | 5 |
| | 8-way | 409100 | BOX-M12 4L8 10m PUR | 5 |

| Technical data | 4-way, 5m | 4-way, 10m | 8-way, 5m | 8-way, 10m |
|-----------------------------|---|------------|-----------|------------|
| Rated voltage | DC 24 V | | | |
| Nominal voltage range | 10 – 30 V | | | |
| Rated current | max. 2A per channel | | | |
| Amperage range | max. total 12 A | | | |
| Number of terminations | 4-pole + PE | | | |
| Slots | 4-way | | 8-way | |
| Cable length | 5.0 | 10.0 | 5.0 | 10.0 |
| Status indication | Supply: 2 x LED green, I/O: each 1 x LED yellow | | | |
| Current consumption per LED | < 10 mA / LED | | | |
| Coding | A | | | |
| Shielding | - | | | |

| General | | | | |
|--|-----------------------------------|-------|---------------------------------|-------|
| Design | M12 x 1, connector | | | |
| Rated insulation voltage (EN 50178) | 32 V | | | |
| Test voltage | 1.0 kV | | | |
| Pollution degree | 3 | | | |
| Insulation resistance | > 10 ⁹ Ω | | | |
| Contact resistance | - | | | |
| Class of flammability according to UL 94 | V0 | | | |
| IP rating | IP 68, in screwed condition | | | |
| Housing material | PBT grey | | | |
| Contact material | CuZn, gold-plated | | | |
| Thread material | CuSn nickel plated | | | |
| Gasket | Viton | | | |
| Cable construction | 3x1.0 + 8x0.34 mm ² | | 3x1.0 + 16x0.34 mm ² | |
| Cable jacket | PUR | | | |
| Conductor insulation | TPE coloured | | | |
| Cable diameter | 8.2 mm | | 9.7 mm | |
| Bending radius | fixed: 4 x D, cable track: 10 x D | | | |
| Termination | - | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Operation temperature range | -20 °C – 80 °C | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | |
| Dimensions (w x h x d) | 60.0 x 25.0 x 102.0 mm | | 60.0 x 25.0 x 152.0 mm | |
| Weight (kg/piece) | 0.860 | 1.560 | 1.160 | 1.940 |
| Approvals | UL, CSA | | | |

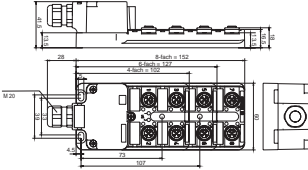
| Accessories | Article number | Type | Pkg. units |
|---------------------------|----------------|---------------------|------------|
| protective cover M12 | 499994 | SK M12 | 50 |
| T-junction M12 on 2 x M12 | 490026 | T-connector M12/M12 | 10 |
| T-junction M12 on 2 x M8 | 490038 | T-connector M12/M8 | 10 |

Actuator sensor interface - M12 - Actuator sensor box IP 68

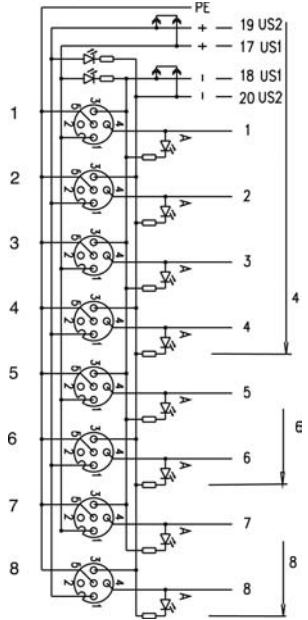
M 12 – Actuator sensor boxes – IP 68 with LED indication 4-way, 8-way / 3-pole + PE, wireable



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|----------|--------|--------------|---|
| Slots | 4-way | 491002 | BOX-M 12-3H4 | 1 |
| | 8-way | 491004 | BOX-M 12-3H8 | 1 |

| Technical data | 4-way | 8-way |
|-----------------------------|---|---------------------|
| Rated voltage | | DC 24 V |
| Nominal voltage range | | 10 – 30 V |
| Rated current | | max. 2A per channel |
| Amperage range | max. total: 10A with single power supply, 2 x 8A with dual power supply | |
| Number of terminations | 3-pole + PE | |
| Slots | 4-way | 8-way |
| Cable length | - | |
| Status indication | Supply: 2 x LED green, I/O: each 1 x LED yellow | |
| Current consumption per LED | < 10 mA / LED | |
| Coding | A | |
| Shielding | - | |

| General | |
|--|--|
| Design | M12 x 1, connector |
| Rated insulation voltage (EN 50178) | 32 V |
| Test voltage | 1.0 kV |
| Pollution degree | 3 |
| Insulation resistance | > 10 ⁹ Ω |
| Contact resistance | - |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 68, in screwed condition |
| Housing material | PBT grey |
| Contact material | CuZn, gold-plated |
| Thread material | CuSn nickel plated |
| Gasket | Viton |
| Cable construction | - |
| Cable jacket | - |
| Conductor insulation | - |
| Cable diameter | 6 – 12 mm |
| Bending radius | - |
| Termination | Screw terminal: 0.08 – 1.5 mm ² |
| Storage temperature range | -40 °C – 90 °C |
| Operation temperature range | -20 °C – 80 °C |
| Temperature range cable fixed | -40 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Dimensions (w x h x d) | 60.0 x 41.5 x 102.0 mm 60.0 x 41.5 x 152.0 mm |
| Weight (kg/piece) | 0.200 0.280 |

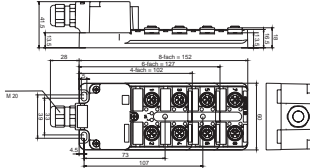
| Accessories | Article number | Type | Pkg. units |
|---------------------------|----------------|---------------------|------------|
| protective cover M12 | 499994 | SK M12 | 50 |
| T-junction M12 on 2 x M12 | 490026 | T-connector M12/M12 | 10 |
| T-junction M12 on 2 x M8 | 490038 | T-connector M12/M8 | 10 |

Actuator sensor interface - M12 - Actuator sensor box IP 68

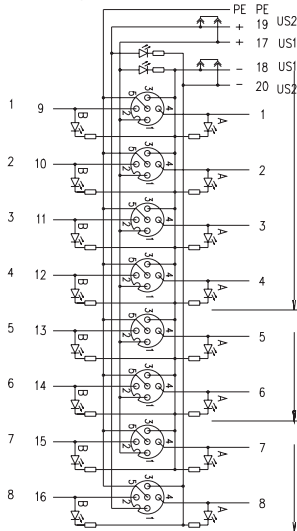
M 12 – Actuator sensor boxes – IP 68 with LED indication 4-way, 8-way / 4-pole + PE, wireable



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|-------------|----------|--------|--------------|---|
| Slots | 4-way | 491003 | BOX-M 12-4H4 | 1 |
| | 8-way | 491005 | BOX-M 12-4H8 | 1 |

| Technical data | 4-way | 8-way |
|-----------------------------|---|-------|
| Rated voltage | DC 24 V | |
| Nominal voltage range | 10 – 30 V | |
| Rated current | max. 2A per channel | |
| Amperage range | max. total: 10A with single power supply, 2 x 8A with dual power supply | |
| Number of terminations | 4-pole + PE | |
| Slots | 4-way | 8-way |
| Cable length | - | |
| Status indication | Supply: 2 x LED green, I/O: each 1 x LED yellow | |
| Current consumption per LED | < 10 mA / LED | |
| Coding | A | |
| Shielding | - | |

| General | |
|--|--|
| Design | M12 x 1, connector |
| Rated insulation voltage (EN 50178) | 32 V |
| Test voltage | 1.0 kV |
| Pollution degree | 3 |
| Insulation resistance | > 10 ⁹ Ω |
| Contact resistance | - |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 68, in screwed condition |
| Housing material | PBT grey |
| Contact material | CuZn, gold-plated |
| Thread material | CuSn nickel plated |
| Gasket | Viton |
| Cable construction | - |
| Cable jacket | - |
| Conductor insulation | - |
| Cable diameter | 6 – 12 mm |
| Bending radius | - |
| Termination | Screw terminal: 0,08 – 1.5 mm ² |
| Storage temperature range | -40 °C – 90 °C |
| Operation temperature range | -20 °C – 80 °C |
| Temperature range cable fixed | -40 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Dimensions (w x h x d) | 60.0 x 41.5 x 102.0 mm 60.0 x 41.5 x 152.0 mm |
| Weight (kg/piece) | 0.200 0.280 |
| Approvals | UL, CSA |

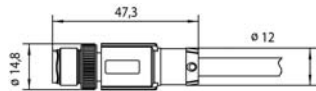
| Accessories | Article number | Type | Pkg. units |
|---------------------------|----------------|---------------------|------------|
| protective cover M12 | 499994 | SK M12 | 50 |
| T-junction M12 on 2 x M12 | 490026 | T-connector M12/M12 | 10 |
| T-junction M12 on 2 x M8 | 490038 | T-connector M12/M8 | 10 |

Actuator sensor interface - CORD SET CAN / DeviceNet

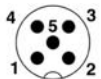
Male M12 straight with PUR cable, shielded 360°, open end
self-locking screwed connection
c-track compatible, halogen free



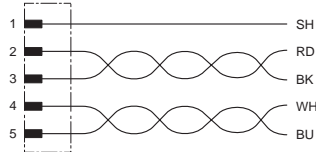
Dimensions



PIN assignment



Circuit diagram



| Description | Part-No. | Type | PU | |
|--------------|----------|--------|----------------------|----|
| Cable length | 2.0 | 475702 | STG5-M12/CAN 2M-PUR | 10 |
| | 5.0 | 475705 | STG5-M12/CAN 5M-PUR | 10 |
| | 10.0 | 475710 | STG5-M12/CAN 10M-PUR | 10 |

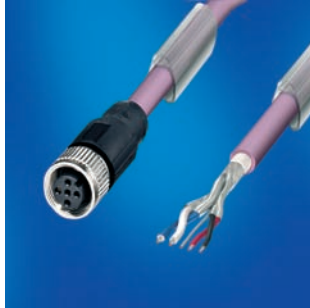
| Technical data | | | |
|-----------------------------|------------|-----|------|
| Rated voltage | AC/DC 24 V | | |
| Nominal voltage range | max. 30 V | | |
| Rated current | 4 A | | |
| Number of terminations | 5 | | |
| Cable length | 2.0 | 5.0 | 10.0 |
| Status indication | - | | |
| Current consumption per LED | - | | |
| Coding | A | | |
| Shielding | 360° | | |

| General | | | |
|--|---|-------|-------|
| Design | M12 x 1, male straight | | |
| Rated insulation voltage (EN 50178) | 60 V | | |
| Test voltage | 1.5 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | >10 ⁹ Ω | | |
| Contact resistance | < 5 mΩ | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 67, in screwed condition | | |
| Housing material | TPU black | | |
| Contact material | CuSn, gold plated nickel | | |
| Thread material | CuSn nickel plated | | |
| Gasket | - | | |
| Cable construction | 2 x AWG 22/19 + 2 x AWG 24/19 + Drainwire AWG 22/19 | | |
| Cable jacket | PUR, RAL 4001 violet | | |
| Conductor insulation | Shield, blue, white, red, black | | |
| Cable diameter | 6.7 mm | | |
| Bending radius | 15 x cable diameter | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Temperature range connector | -25°C – 90°C | | |
| Temperature range cable fixed | -40 °C – 80 °C | | |
| Temperature range cable moving | -20 °C – 75 °C | | |
| Mechanical service life | - | | |
| Weight (kg/piece) | 0.135 | 0.305 | 0.605 |

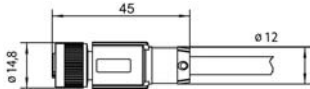
| Approvals | | | |
|---|----------------|------------|------------|
| the cable is UL, CSA certified 80° 300V | | | |
| Accessories | Article number | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - CORD SET CAN / DeviceNet

Female M12 straight with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible, halogen free



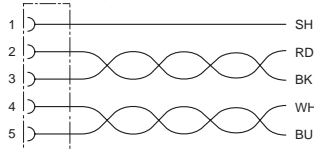
Dimensions



PIN assignment



Circuit diagram



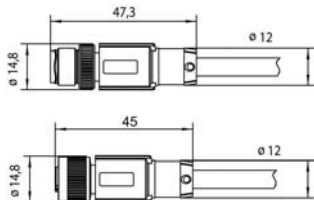
| Description | Part-No. | Type | PU |
|--|---|----------------------|-------------------|
| Cable length | 2.0 | KUG5-M12/CAN 2M-PUR | 10 |
| | 5.0 | KUG5-M12/CAN 5M-PUR | 10 |
| | 10.0 | KUG5-M12/CAN 10M-PUR | 10 |
| Technical data | | | |
| Rated voltage | AC/DC 24 V | | |
| Nominal voltage range | max. 30 V | | |
| Rated current | 4 A | | |
| Number of terminations | 5 | | |
| Cable length | 2.0 | 5.0 | 10.0 |
| Status indication | - | | |
| Current consumption per LED | - | | |
| Coding | A | | |
| Shielding | 360° | | |
| General | | | |
| Design | M12 x 1, female straight | | |
| Rated insulation voltage (EN 50178) | 60 V | | |
| Test voltage | 1.5 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | >10 ⁹ Ω | | |
| Contact resistance | < 5 mΩ | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 67, in screwed condition | | |
| Housing material | TPU black | | |
| Contact material | CuSn, gold plated nickel | | |
| Thread material | CuSn nickel plated | | |
| Gasket | NBR | | |
| Cable construction | 2 x AWG 22/19 + 2 x AWG 24/19 + Drainwire AWG 22/19 | | |
| Cable jacket | PUR, RAL 4001 violet | | |
| Conductor insulation | Shield, blue, white, red, black | | |
| Cable diameter | 6.7 mm | | |
| Bending radius | 15 x cable diameter | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Temperature range connector | -25 °C – 90 °C | | |
| Temperature range cable fixed | -40 °C – 80 °C | | |
| Temperature range cable moving | -20 °C – 75 °C | | |
| Mechanical service life | - | | |
| Weight (kg/piece) | 0.135 | 0.305 | 0.605 |
| Approvals | the cable is UL, CSA certified 80° 300V | | |
| Accessories | | | |
| | Article number | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - CORD SET CAN / DeviceNet

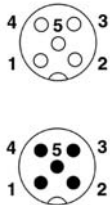
Male-female M12 straight with PUR cable, shielded 360°
self-locking screwed connection
c-track compatible, halogen free



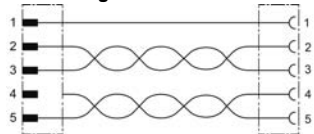
Dimensions



PIN assignment



Circuit diagram



| Description | Part-No. | Type | PU |
|--------------|----------|--------|-----------------------------------|
| Cable length | 0.3 | 475903 | STG5-M12/KUG5-M12/CAN 0,3M-PUR 10 |
| | 0.5 | 475905 | STG5-M12/KUG5-M12/CAN 0,5M-PUR 10 |
| | 0.6 | 475906 | STG5-M12/KUG5-M12/CAN 0,6M-PUR 10 |
| | 0.7 | 475907 | STG5-M12/KUG5-M12/CAN 0,7M-PUR 10 |
| | 0.8 | 475908 | STG5-M12/KUG5-M12/CAN 0,8M-PUR 10 |
| | 1.0 | 475910 | STG5-M12/KUG5-M12/CAN 1,0M-PUR 10 |
| | 1.5 | 475915 | STG5-M12/KUG5-M12/CAN 1,5M-PUR 10 |
| | 2.0 | 475920 | STG5-M12/KUG5-M12/CAN 2,0M-PUR 10 |
| | 3.0 | 475930 | STG5-M12/KUG5-M12/CAN 3,5M-PUR 10 |
| | 5.0 | 475950 | STG5-M12/KUG5-M12/CAN 5,0M-PUR 10 |

Technical data

| | | | | | | | | | | |
|-----------------------------|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Rated voltage | AC/DC 24 V | | | | | | | | | |
| Nominal voltage range | max. 30 V | | | | | | | | | |
| Rated current | 4 A | | | | | | | | | |
| Number of terminations | 5 | | | | | | | | | |
| Cable length | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 1.5 | 2.0 | 3.0 | 5.0 |
| Status indication | - | | | | | | | | | |
| Current consumption per LED | - | | | | | | | | | |
| Coding | A | | | | | | | | | |
| Shielding | 360° | | | | | | | | | |

General

| | | | | | | | | | | |
|--|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Design | M12 x 1, male - female straight | | | | | | | | | |
| Rated insulation voltage (EN 50178) | 60 V | | | | | | | | | |
| Test voltage | 1.5 kV | | | | | | | | | |
| Pollution degree | 3 | | | | | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | | | | | |
| Contact resistance | < 5 mΩ | | | | | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | | | | | |
| IP rating | IP 67, in screwed condition | | | | | | | | | |
| Housing material | TPU black | | | | | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | | | | | |
| Thread material | CuSn nickel plated | | | | | | | | | |
| Gasket | NBR (female) | | | | | | | | | |
| Cable construction | 2 x AWG 22/19 + 2 x AWG 24/19 + Drainwire AWG 22/19 | | | | | | | | | |
| Cable jacket | PUR, RAL 4001 violet | | | | | | | | | |
| Conductor insulation | Shield, blue, white, red, black | | | | | | | | | |
| Cable diameter | 6.7 mm | | | | | | | | | |
| Bending radius | 15 x cable diameter | | | | | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | | | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | | | | | | | |
| Temperature range cable moving | -20 °C – 75 °C | | | | | | | | | |
| Mechanical service life | - | | | | | | | | | |
| Weight (kg/piece) | 0.055 | 0.070 | 0.075 | 0.080 | 0.085 | 0.100 | 0.125 | 0.150 | 0.230 | 0.315 |
| Approvals | the cable is UL, CSA certified 80° 300V | | | | | | | | | |

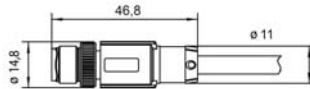
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - CORD SET ETHERNET

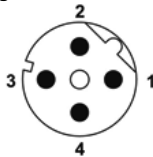
Male M12 straight with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible, halogen free



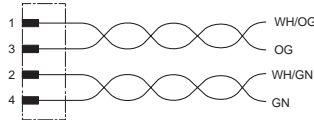
Dimensions



PIN assignment



Circuit diagram



| Description | Part-No. | Type | PU | |
|--------------|----------|--------|---------------------|----|
| Cable length | 2.0 | 475002 | STG4-M12/ET 2M-PUR | 10 |
| | 5.0 | 475005 | STG4-M12/ET 5M-PUR | 10 |
| | 10.0 | 475010 | STG4-M12/ET 10M-PUR | 10 |

Technical data

| | | | |
|-----------------------------|------------|-----|------|
| Rated voltage | AC/DC 24 V | | |
| Nominal voltage range | max. 30 V | | |
| Rated current | 4 A | | |
| Number of terminations | 4 | | |
| Cable length | 2.0 | 5.0 | 10.0 |
| Status indication | - | | |
| Current consumption per LED | - | | |
| Coding | D | | |
| Shielding | 360° | | |

General

| | | | |
|--|-----------------------------|-------|-------|
| Design | M12 x 1, male straight | | |
| Rated insulation voltage (EN 50178) | 250 V | | |
| Test voltage | 1.5 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | >10 ⁹ Ω | | |
| Contact resistance | < 5 mΩ | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 65, in screwed condition | | |
| Housing material | TPU black | | |
| Contact material | CuSn, gold plated nickel | | |
| Thread material | CuSn nickel plated | | |
| Gasket | - | | |
| Cable construction | 2 x 2 x AWG 26/7 | | |
| Cable jacket | PUR, RAL 5021 blue | | |
| Conductor insulation | white/green, white/orange | | |
| Cable diameter | 6.7 mm | | |
| Bending radius | 15 x cable diameter | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Temperature range connector | -25 °C – 90 °C | | |
| Temperature range cable fixed | -20 °C – 70 °C | | |
| Temperature range cable moving | 0 °C – 50 °C | | |
| Mechanical service life | - | | |
| Weight (kg/piece) | 0.140 | 0.330 | 0.640 |

Approvals the cable is UL, CSA certified 80° 300V

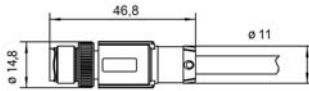
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - CORD SET EHTERNET

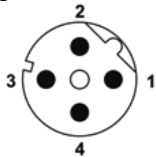
Male M12 straight on male M12 straight with PUR cable, shielded 360°
self-locking screwed connection
c-track compatible, halogen free



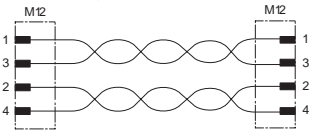
Dimensions



PIN assignment



Circuit diagram



| Description | Part-No. | Type | PU | |
|--------------|----------|--------|-------------------------------|----|
| Cable length | 0.3 | 475203 | STG4-M12/STG4-M12/ET 0,3M PUR | 10 |
| | 0.6 | 475206 | STG4-M12/STG4-M12/ET 0,6M PUR | 10 |
| | 1.0 | 475210 | STG4-M12/STG4-M12/ET 1,0M PUR | 10 |
| | 1.5 | 475215 | STG4-M12/STG4-M12/ET 1,5M PUR | 10 |
| | 2.0 | 475220 | STG4-M12/STG4-M12/ET 2,0M PUR | 10 |
| | 5.0 | 475250 | STG4-M12/STG4-M12/ET 5,0M PUR | 10 |

Technical data

| | | | | | | |
|-----------------------------|------------|-----|-----|-----|-----|-----|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 30 V | | | | | |
| Rated current | 4 A | | | | | |
| Number of terminations | 4 | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | D | | | | | |
| Shielding | 360° | | | | | |

General

| | | | | | | |
|--|---|-------|-------|-------|-------|-------|
| Design | M12 x 1, male straight / M12 x 1, male straight | | | | | |
| Rated insulation voltage (EN 50178) | 250 V | | | | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | < 5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | | | |
| Cable construction | 2 x 2 x AWG 26/7 | | | | | |
| Cable jacket | PUR, RAL 5021 blue | | | | | |
| Conductor insulation | white/green, white/orange | | | | | |
| Cable diameter | 6.7 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -20 °C – 70 °C | | | | | |
| Temperature range cable moving | 0 °C – 50 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.060 | 0.070 | 0.090 | 0.110 | 0.150 | 0.325 |
| Approvals | the cable is UL, CSA certified 80° 300V | | | | | |

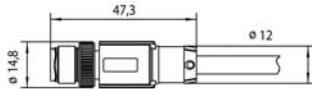
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - CORD SET INTERBUS

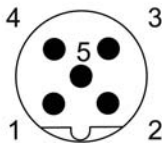
Male M12 straight with PUR cable, shielded 360°, open end
self-locking screwed connection
c-track compatible, halogen free



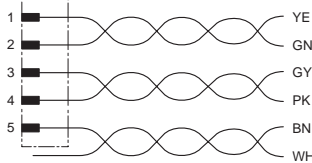
Dimensions



PIN assignment



Circuit diagram



| Description | Part-No. | Type | PU | |
|--------------|----------|--------|---------------------|----|
| Cable length | 2.0 | 463002 | STG5-M12/IB 2M-PUR | 10 |
| | 5.0 | 463005 | STG5-M12/IB 5M-PUR | 10 |
| | 10.0 | 463010 | STG5-M12/IB 10M-PUR | 10 |

Technical data

| | | | |
|-----------------------------|-------------|-----|------|
| Rated voltage | AC/DC 24 V | | |
| Nominal voltage range | max. 30 V | | |
| Rated current | 4 A | | |
| Number of terminations | 5 | | |
| Cable length | 2.0 | 5.0 | 10.0 |
| Status indication | - | | |
| Current consumption per LED | - | | |
| Coding | B - in vers | | |
| Shielding | 360° | | |

General

| | | | |
|--|--|-------|-------|
| Design | M12 x 1, male straight | | |
| Rated insulation voltage (EN 50178) | 60 V | | |
| Test voltage | 1.5 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | >10 ⁹ Ω | | |
| Contact resistance | < 5 mΩ | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 65, in screwed condition | | |
| Housing material | TPU black | | |
| Contact material | CuSn, gold plated nickel | | |
| Thread material | CuSn nickel plated | | |
| Gasket | - | | |
| Cable construction | 2 x 2 x AWG 26/7 + 2 x AWG 24/19 | | |
| Cable jacket | PUR, RAL 6017 green | | |
| Conductor insulation | Shield, yellow, green, grey, pink, brown | | |
| Cable diameter | 8.0 mm | | |
| Bending radius | 15 x cable diameter | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Temperature range connector | -25 °C – 90 °C | | |
| Temperature range cable fixed | -40 °C – 80 °C | | |
| Temperature range cable moving | -20 °C – 70 °C | | |
| Mechanical service life | - | | |
| Weight (kg/piece) | 0.160 | 0.400 | 0.707 |

Approvals the cable is UL, CSA certified 80° 300V

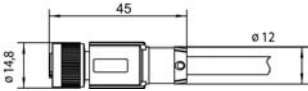
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - CORD SET INTERBUS

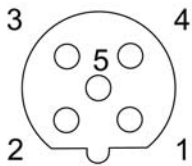
Female M12 straight with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible, halogen free



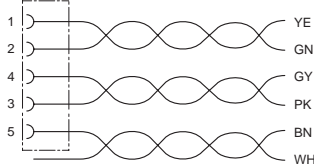
Dimensions



PIN assignment



Circuit diagram



| Description | Part-No. | Type | PU | |
|--------------|----------|--------|---------------------|----|
| Cable length | 2.0 | 463102 | KUG5-M12/IB 2M-PUR | 10 |
| | 5.0 | 463105 | KUG5-M12/IB 5M-PUR | 10 |
| | 10.0 | 463110 | KUG5-M12/IB 10M-PUR | 10 |

Technical data

| | | | |
|-----------------------------|------------|-----|------|
| Rated voltage | AC/DC 24 V | | |
| Nominal voltage range | max. 30 V | | |
| Rated current | 4 A | | |
| Number of terminations | 5 | | |
| Cable length | 2.0 | 5.0 | 10.0 |
| Status indication | - | | |
| Current consumption per LED | - | | |
| Coding | B - invers | | |
| Shielding | 360° | | |

General

| | | | |
|--|--|--|--|
| Design | M12 x 1, female straight | | |
| Rated insulation voltage (EN 50178) | 60 V | | |
| Test voltage | 1.5 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | >10 ⁹ Ω | | |
| Contact resistance | < 5 mΩ | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 65, in screwed condition | | |
| Housing material | TPU black | | |
| Contact material | CuSn, gold plated nickel | | |
| Thread material | CuSn nickel plated | | |
| Gasket | NBR | | |
| Cable construction | 2 x 2 x AWG 26/7 + 2 x AWG 24/19 | | |
| Cable jacket | PUR, RAL 6017 green | | |
| Conductor insulation | Shield, yellow, green, grey, pink, brown | | |
| Cable diameter | 8.0 mm | | |
| Bending radius | 15 x cable diameter | | |
| Storage temperature range | -40 °C – 90 °C | | |
| Temperature range connector | -25 °C – 90 °C | | |
| Temperature range cable fixed | -40 °C – 80 °C | | |
| Temperature range cable moving | -20 °C – 70 °C | | |
| Mechanical service life | - | | |

| | | | |
|-------------------|-------|-------|-------|
| Weight (kg/piece) | 0.160 | 0.365 | 0.707 |
|-------------------|-------|-------|-------|

Approvals the cable is UL, CSA certified 80° 300V

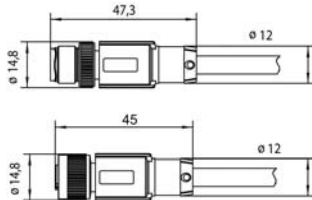
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - CORD SET INTERBUS

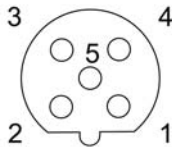
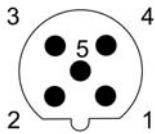
Male-female M12 straight with PUR cable, shielded 360°
self-locking screwed connection
c-track compatible, halogen free



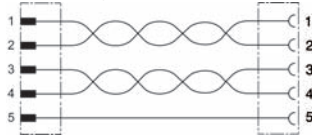
Dimensions



PIN assignment



Circuit diagram



| Description | Part-No. | Type | PU | |
|--------------|----------|--------|-------------------------------|----|
| Cable length | 0.3 | 463203 | STG5-M12/KUG5-M12/IB 0,3M-PUR | 10 |
| | 0.6 | 463206 | STG5-M12/KUG5-M12/IB 0,6M-PUR | 10 |
| | 1.0 | 463210 | STG5-M12/KUG5-M12/IB 1,0M-PUR | 10 |
| | 1.5 | 463215 | STG5-M12/KUG5-M12/IB 1,5M-PUR | 10 |
| | 2.0 | 463220 | STG5-M12/KUG5-M12/IB 2,0M-PUR | 10 |
| | 5.0 | 463250 | STG5-M12/KUG5-M12/IB 5,0M-PUR | 10 |

Technical data

| | | | | | | | |
|-----------------------------|------------|-----|-----|-----|-----|-----|--|
| Rated voltage | AC/DC 24 V | | | | | | |
| Nominal voltage range | max. 30 V | | | | | | |
| Rated current | 4 A | | | | | | |
| Number of terminations | 5 | | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 | |
| Status indication | - | | | | | | |
| Current consumption per LED | - | | | | | | |
| Coding | B - invers | | | | | | |
| Shielding | 360° | | | | | | |

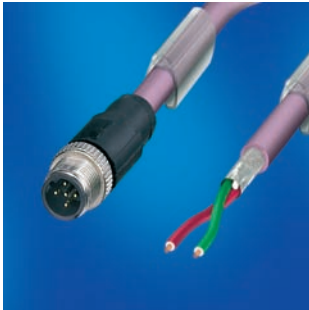
General

| | | | | | | | |
|--|--|-------|-------|-------|-------|-------|--|
| Design | M12 x 1, male - female straight | | | | | | |
| Rated insulation voltage (EN 50178) | 60 V | | | | | | |
| Test voltage | 1.5 kV | | | | | | |
| Pollution degree | 3 | | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | | |
| Contact resistance | < 5 mΩ | | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | | |
| IP rating | IP 65, in screwed condition | | | | | | |
| Housing material | TPU black | | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | | |
| Thread material | CuSn nickel plated | | | | | | |
| Gasket | NBR (female) | | | | | | |
| Cable construction | 2 x 2 x AWG 26/7 + 2 x AWG 24/19 | | | | | | |
| Cable jacket | PUR, RAL 6017 green | | | | | | |
| Conductor insulation | Shield, yellow, green, grey, pink, brown | | | | | | |
| Cable diameter | 8.0 mm | | | | | | |
| Bending radius | 15 x cable diameter | | | | | | |
| Storage temperature range | -40 °C – 80 °C | | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | | | | |
| Temperature range cable moving | -20 °C – 70 °C | | | | | | |
| Mechanical service life | - | | | | | | |
| Weight (kg/piece) | 0.570 | 0.750 | 0.107 | 0.140 | 0.170 | 0.385 | |
| Approvals | the cable is UL, CSA certified 80° 300V | | | | | | |

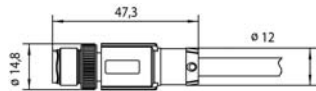
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - CORD SET PROFIBUS

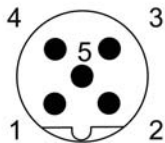
Male M12 straight with PUR cable, shielded 360°, end open
self-locking screwed connection
c-track compatible, halogen free



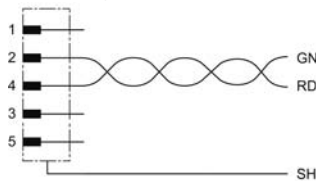
Dimensions



PIN assignment



Circuit diagram



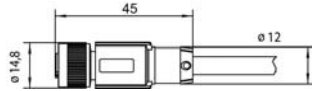
| Description | Part-No. | Type | PU | |
|--|---|-------------|---------------------|----|
| Cable length | 2.0 | 475302 | STG2-M12/PB 2M-PUR | 10 |
| | 5.0 | 475305 | STG2-M12/PB 5M-PUR | 10 |
| | 10.0 | 475310 | STG2-M12/PB 10M-PUR | 10 |
| Technical data | | | | |
| Rated voltage | AC/DC 24 V | | | |
| Nominal voltage range | max. 30 V | | | |
| Rated current | 4 A | | | |
| Number of terminations | 2 | | | |
| Cable length | 2.0 | 5.0 | 10.0 | |
| Status indication | - | | | |
| Current consumption per LED | - | | | |
| Coding | B - invers | | | |
| Shielding | 360° | | | |
| General | | | | |
| Design | M12 x 1, male straight | | | |
| Rated insulation voltage (EN 50178) | 60 V | | | |
| Test voltage | 1.5 kV | | | |
| Pollution degree | 3 | | | |
| Insulation resistance | >10 ⁹ Ω | | | |
| Contact resistance | < 5 mΩ | | | |
| Class of flammability according to UL 94 | V0 | | | |
| IP rating | IP 65, in screwed condition | | | |
| Housing material | TPU black | | | |
| Contact material | CuSn, gold plated nickel | | | |
| Thread material | CuSn nickel plated | | | |
| Gasket | - | | | |
| Cable construction | 1 x 2 x 0,64 mm / AWG 24/19 | | | |
| Cable jacket | PUR, RAL 4001 violet | | | |
| Conductor insulation | Shield, red, green | | | |
| Cable diameter | 7.8 mm | | | |
| Bending radius | cable diameter | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Temperature range connector | -25°C – 90°C | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | |
| Temperature range cable moving | -20 °C – 80 °C | | | |
| Mechanical service life | - | | | |
| Weight (kg/piece) | 0.160 | 0.350 | 0.675 | |
| Approvals | the cable is UL, CSA certified 80° 300V | | | |
| Accessories | Article number | Type | Pkg. units | |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 | |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 | |

Actuator sensor interface - CORD SET PROFIBUS

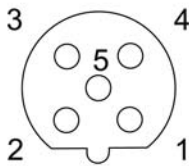
Female M12 straight with PUR cable, shielded 360°, end open
self-locking screwed connection
c-track compatible, halogen free



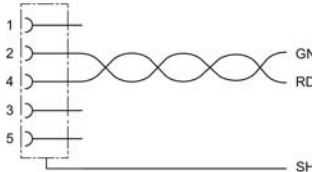
Dimensions



PIN assignment



Circuit diagram



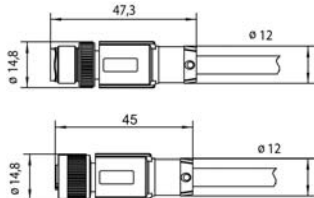
| Description | Part-No. | Type | PU | |
|--|---|-------------|---------------------|----|
| Cable length | 2.0 | 475402 | KUG2-M12/PB 2M-PUR | 10 |
| | 5.0 | 475405 | KUG2-M12/PB 5M-PUR | 10 |
| | 10.0 | 475410 | KUG2-M12/PB 10M-PUR | 10 |
| Technical data | | | | |
| Rated voltage | AC/DC 24 V | | | |
| Nominal voltage range | max. 30 V | | | |
| Rated current | 4 A | | | |
| Number of terminations | 2 | | | |
| Cable length | 2.0 | 5.0 | 10.0 | |
| Status indication | - | | | |
| Current consumption per LED | - | | | |
| Coding | B - invers | | | |
| Shielding | 360° | | | |
| General | | | | |
| Design | M12 x 1, female straight | | | |
| Rated insulation voltage (EN 50178) | 60 V | | | |
| Test voltage | 1.5 kV | | | |
| Pollution degree | 3 | | | |
| Insulation resistance | >10 ⁹ Ω | | | |
| Contact resistance | < 5 mΩ | | | |
| Class of flammability according to UL 94 | V0 | | | |
| IP rating | IP 65, in screwed condition | | | |
| Housing material | TPU black | | | |
| Contact material | CuSn, gold plated nickel | | | |
| Thread material | CuSn nickel plated | | | |
| Gasket | - | | | |
| Cable construction | 1 x 2 x 0,64 mm / AWG 24/19 | | | |
| Cable jacket | PUR, RAL 4001 violet | | | |
| Conductor insulation | Shield, red, green | | | |
| Cable diameter | 7.8 mm | | | |
| Bending radius | 10 x cable diameter | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Temperature range connector | -25°C – 90°C | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | |
| Temperature range cable moving | -20 °C – 80 °C | | | |
| Mechanical service life | - | | | |
| Weight (kg/piece) | 0.160 | 0.350 | 0.675 | |
| Approvals | the cable is UL, CSA certified 80° 300V | | | |
| Accessories | Article number | Type | Pkg. units | |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 | |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 | |

Actuator sensor interface - CORD SET PROFIBUS

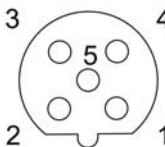
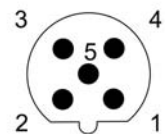
Male-female M12 straight with PUR cable, shielded 360°
self-locking screwed connection
c-track compatible, halogen free



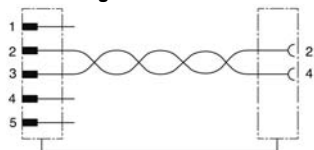
Dimensions



PIN assignment



Circuit diagram



| Description | Part-No. | Type | PU | |
|--------------|----------|--------|-------------------------------|----|
| Cable length | 0.3 | 475503 | STG2-M12/KUG2-M12/PB 0,3M-PUR | 10 |
| | 0.6 | 475506 | STG2-M12/KUG2-M12/PB 0,6M-PUR | 10 |
| | 1.0 | 475510 | STG2-M12/KUG2-M12/PB 1,0M-PUR | 10 |
| | 1.5 | 475515 | STG2-M12/KUG2-M12/PB 1,5M-PUR | 10 |
| | 2.0 | 475520 | STG2-M12/KUG2-M12/PB 2,0M-PUR | 10 |
| | 5.0 | 475550 | STG2-M12/KUG2-M12/PB 5,0M-PUR | 10 |

Technical data

| | | | | | | |
|-----------------------------|------------|-----|-----|-----|-----|-----|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 30 V | | | | | |
| Rated current | 4 A | | | | | |
| Number of terminations | 2 | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | B - invers | | | | | |
| Shielding | 360° | | | | | |

General

| | | | | | | |
|--|---------------------------------|-------|-------|-------|-------|-------|
| Design | M12 x 1, male - female straight | | | | | |
| Rated insulation voltage (EN 50178) | 60 V | | | | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | < 5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 65, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | NBR (female) | | | | | |
| Cable construction | 1 x 2 x 0,64 mm / AWG 24/19 | | | | | |
| Cable jacket | PUR, RAL 4001 violet | | | | | |
| Conductor insulation | Shield, red, green | | | | | |
| Cable diameter | 7.8 mm | | | | | |
| Bending radius | 10 x cable diameter | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -40 °C – 80 °C | | | | | |
| Temperature range cable moving | -20 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.060 | 0.080 | 0.105 | 0.140 | 0.017 | 0.365 |

Approvals the cable is UL, CSA certified 80° 300V

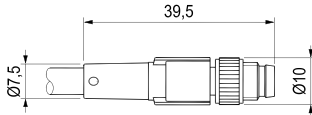
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - M8 – cables

Male M8 straight with PUR cable, open end self-locking screwed connection c-track compatible

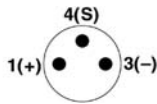


Dimensions

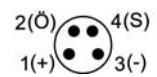


PIN assignment

486020, 486050, 486100

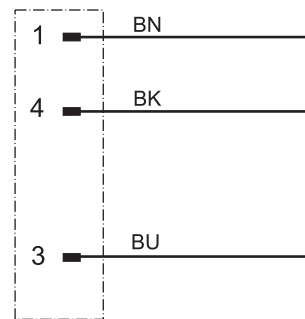


447020, 447050, 447100

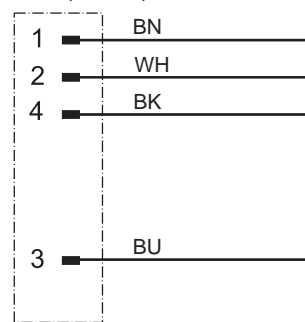


Circuit diagram

486020, 486050, 486100



447020, 447050, 447100



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|-----------------|----|
| 3-pole | | | | |
| Cable length | 2.0 | 486020 | STG3-M8 2M-PUR | 10 |
| | 5.0 | 486050 | STG3-M8 5M-PUR | 10 |
| | 10.0 | 486100 | STG3-M8 10M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 2.0 | 447020 | STG4-M8 2M-PUR | 10 |
| | 5.0 | 447050 | STG4-M8 5M-PUR | 10 |
| | 10.0 | 447100 | STG4-M8 10M-PUR | 10 |

| Technical data | 3-pole | | | 4-pole | | |
|-----------------------------|------------|-----|------|--------|-----|------|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 30 V | | | | | |
| Rated current | 3 A | | | | | |
| Number of terminations | 3 | | | 4 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | - | | | | | |
| Shielding | - | | | | | |

| General | | | | | | |
|--|------------------------------------|------|------|------------------------------------|------|------|
| Design | M8 x 1, male straight | | | | | |
| Rated insulation voltage (EN 50178) | 100 V | | | | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | < 5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | | | |
| Cable construction | 3 x 0.25mm ² (32 x 0.1) | | | 4 x 0.25mm ² (32 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 4.4 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.05 | 0.14 | 0.27 | 0.07 | 0.16 | 0.32 |

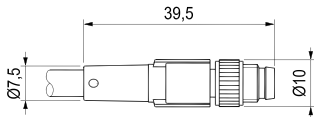
| Approvals | | | |
|------------------------|----------------|-----------|------------|
| cULus | | | |
| Accessories | Article number | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 |

Actuator sensor interface - M8 – cables

Male M8 straight with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible

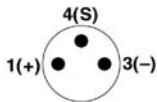


Dimensions

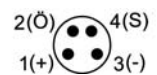


PIN assignment

458102, 458105, 458110

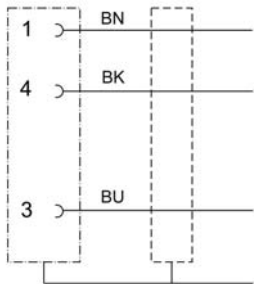


458202, 458205, 458210

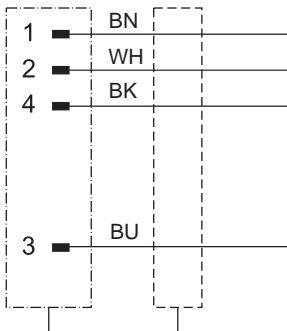


Circuit diagram

458102, 458105, 458110



458202, 458205, 458210

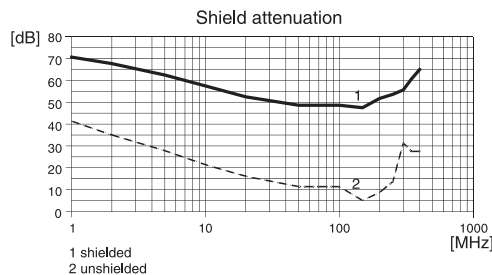


| Description | Part-No. | Type | PU | |
|---------------|----------|--------|---------------------|----|
| 3-pole | | | | |
| Cable length | 2.0 | 458102 | STG3-M8 (C) 2M-PUR | 10 |
| | 5.0 | 458105 | STG3-M8 (C) 5M-PUR | 10 |
| | 10.0 | 458110 | STG3-M8 (C) 10M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 2.0 | 458202 | STG4-M8 (C) 2M-PUR | 10 |
| | 5.0 | 458205 | STG4-M8 (C) 5M-PUR | 10 |
| | 10.0 | 458210 | STG4-M8 (C) 10M-PUR | 10 |

| Technical data | 3-pole | | | 4-pole | | |
|--|------------------------------------|------|------|------------------------------------|------|------|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 30 V | | | | | |
| Rated current | 3 A | | | | | |
| Number of terminations | 3 | | | 4 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | - | | | | | |
| Shielding | 360° | | | | | |
| General | | | | | | |
| Design | M8 x 1, male straight | | | | | |
| Rated insulation voltage (EN 50178) | 100 V | | | | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | < 5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | | | |
| Cable construction | 3 x 0.25mm ² (32 x 0.1) | | | 4 x 0.25mm ² (32 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 5.0 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.08 | 0.19 | 0.38 | 0.09 | 0.21 | 0.42 |
| Approvals | cULus | | | | | |

| Accessories | Article number | Type | Pkg. units |
|------------------------|----------------|-----------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 |

Action chart

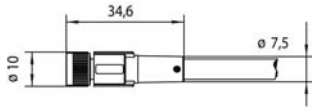


Actuator sensor interface - M8 – cables

Female M8 straight with PUR cable, open end self-locking screwed connection c-track compatible

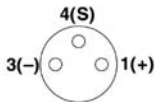


Dimensions



PIN assignment

481020, 481050, 481100

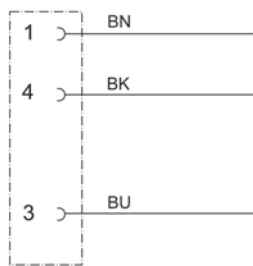


415020, 415050, 415100

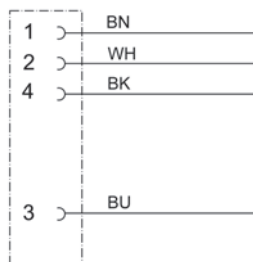


Circuit diagram

481020, 481050, 481100



415020, 415050, 415100



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|-----------------|----|
| 3-pole | | | | |
| Cable length | 2.0 | 481020 | KUG3-M8 2M-PUR | 10 |
| | 5.0 | 481050 | KUG3-M8 5M-PUR | 10 |
| | 10.0 | 481100 | KUG3-M8 10M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 2.0 | 415020 | KUG4-M8 2M-PUR | 10 |
| | 5.0 | 415050 | KUG4-M8 5M-PUR | 10 |
| | 10.0 | 415100 | KUG4-M8 10M-PUR | 10 |

| Technical data | 3-pole | | | 4-pole | | |
|-----------------------------|------------|-----|------|--------|-----|------|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 30 V | | | | | |
| Rated current | 3 A | | | | | |
| Number of terminations | 3 | | | 4 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | - | | | | | |
| Shielding | - | | | | | |

| General | | | | | | |
|--|------------------------------------|------|------|------------------------------------|------|------|
| Design | M8 x 1, female straight | | | | | |
| Rated insulation voltage (EN 50178) | 100 V | | | | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | < 5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | NBR | | | | | |
| Cable construction | 3 x 0.25mm ² (32 x 0.1) | | | 4 x 0.25mm ² (32 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 4.4 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.05 | 0.14 | 0.27 | 0.07 | 0.16 | 0.32 |

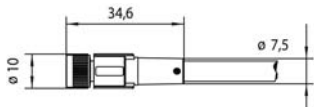
| Approvals | | | | | | |
|------------------------|----------------|--|--|-----------|------------|--|
| cULus | | | | | | |
| Accessories | Article number | | | Type | Pkg. units | |
| Cable markers 4x23mm | 499988 | | | LB M8/M12 | 5 | |
| Torque setting tool M8 | 490090 | | | DM-SET M8 | 1 | |

Actuator sensor interface - M8 – cables

Female M8 straight with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible

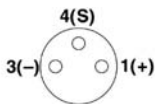


Dimensions



PIN assignment

458302, 458305, 458310

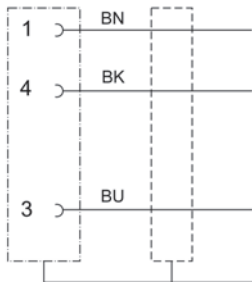


458402, 458405, 458410

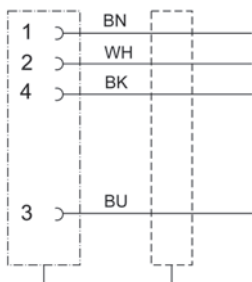


Circuit diagram

458302, 458305, 458310



458402, 458405, 458410



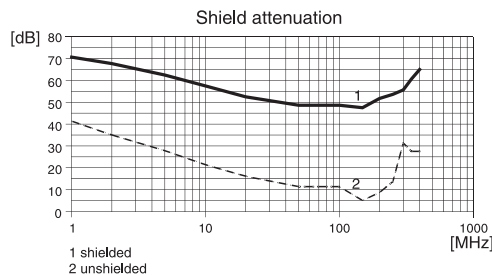
| Description | Part-No. | Type | PU | |
|---------------|----------|--------|---------------------|----|
| 3-pole | | | | |
| Cable length | 2.0 | 458302 | KUG3-M8 (C) 2M-PUR | 10 |
| | 5.0 | 458305 | KUG3-M8 (C) 5M-PUR | 10 |
| | 10.0 | 458310 | KUG3-M8 (C) 10M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 2.0 | 458402 | KUG4-M8 (C) 2M-PUR | 10 |
| | 5.0 | 458405 | KUG4-M8 (C) 5M-PUR | 10 |
| | 10.0 | 458410 | KUG4-M8 (C) 10M-PUR | 10 |

| Technical data | 3-pole | | | 4-pole | | |
|-----------------------------|------------|-----|------|--------|-----|------|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 30 V | | | | | |
| Rated current | 3 A | | | | | |
| Number of terminations | 3 | | | 4 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | - | | | | | |
| Shielding | 360° | | | | | |

| General | | | | | | |
|--|------------------------------------|------|------|------------------------------------|------|------|
| Design | M8 x 1, female straight | | | | | |
| Rated insulation voltage (EN 50178) | 100 V | | | | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | < 5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | NBR | | | | | |
| Cable construction | 3 x 0.25mm ² (32 x 0.1) | | | 4 x 0.25mm ² (32 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 5.0 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.08 | 0.19 | 0.38 | 0.09 | 0.21 | 0.42 |

| Approvals | | | |
|------------------------|----------------|-----------|------------|
| cULus | | | |
| Accessories | Article number | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | DM-SET M8 | 5 |

Action chart

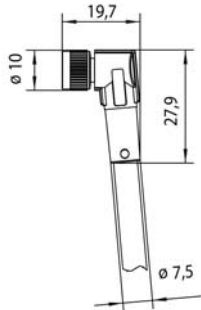


Actuator sensor interface - M8 – cables

Female M8 angled with PUR cable, open end self-locking screwed connection c-track compatible

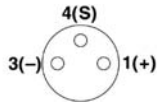


Dimensions



PIN assignment

474020, 474050, 474100

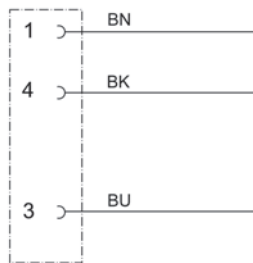


416020, 416050, 416100

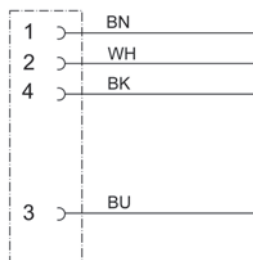


Circuit diagram

474020, 474050, 474100



416020, 416050, 416100



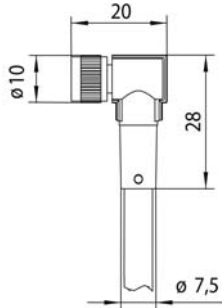
| Description | Part-No. | | | Type | PU |
|--|------------------------------------|--------|------|------------------------------------|-------------------|
| 3-pole | | | | | |
| Cable length | 2.0 | 474020 | | KUW3-M8 2M-PUR | 10 |
| | 5.0 | 474050 | | KUW3-M8 5M-PUR | 10 |
| | 10.0 | 474100 | | KUW3-M8 10M-PUR | 10 |
| 4-pole | | | | | |
| Cable length | 2.0 | 416020 | | KUW4-M8 2M-PUR | 10 |
| | 5.0 | 416050 | | KUW4-M8 5M-PUR | 10 |
| | 10.0 | 416100 | | KUW4-M8 10M-PUR | 10 |
| Technical data | | | | | |
| | 3-pole | | | 4-pole | |
| Rated voltage | AC/DC 24 V | | | | |
| Nominal voltage range | max. 30 V | | | | |
| Rated current | 3 A | | | | |
| Number of terminations | 3 | | | 4 | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 10.0 |
| Status indication | - | | | | |
| Current consumption per LED | - | | | | |
| Coding | - | | | | |
| Shielding | - | | | | |
| General | | | | | |
| Design | M8 x 1, female angled | | | | |
| Rated insulation voltage (EN 50178) | 100 V | | | | |
| Test voltage | 1.5 kV | | | | |
| Pollution degree | 3 | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | |
| Contact resistance | < 5 mΩ | | | | |
| Class of flammability according to UL 94 | V0 | | | | |
| IP rating | IP 67, in screwed condition | | | | |
| Housing material | TPU black | | | | |
| Contact material | CuSn, gold plated nickel | | | | |
| Thread material | CuSn nickel plated | | | | |
| Gasket | NBR | | | | |
| Cable construction | 3 x 0.25mm ² (32 x 0.1) | | | 4 x 0.25mm ² (32 x 0.1) | |
| Cable jacket | PUR, RAL 9001 black | | | | |
| Conductor insulation | PVC coloured | | | | |
| Cable diameter | 4.4 mm | | | | |
| Bending radius | 15 x cable diameter | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | |
| Mechanical service life | - | | | | |
| Weight (kg/piece) | 0.05 | 0.14 | 0.26 | 0.06 | 0.16 0.31 |
| Approvals | cULus | | | | |
| Accessories | | | | | |
| | Article number | | | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | | | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | | | DM-SET M8 | 1 |

Actuator sensor interface - M8 – cables

Female M8 angled with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible

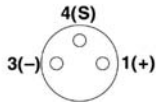


Dimensions



PIN assignment

458502, 458505, 458510

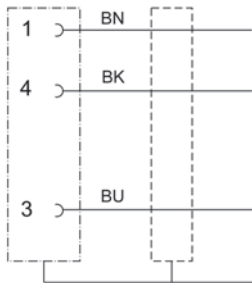


458602, 458605, 458610

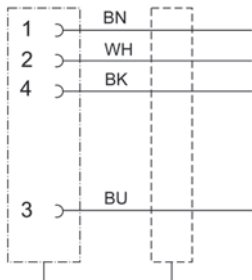


Circuit diagram

458502, 458505, 458510



458602, 458605, 458610

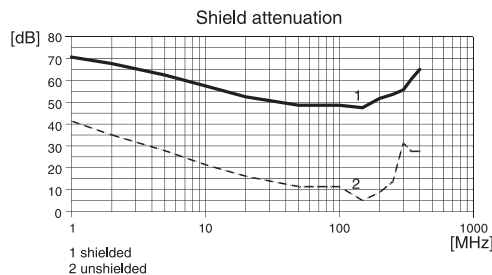


| Description | Part-No. | Type | PU | |
|---------------|----------|--------|---------------------|----|
| 3-pole | | | | |
| Cable length | 2.0 | 458502 | KUW3-M8 (C) 2M-PUR | 10 |
| | 5.0 | 458505 | KUW3-M8 (C) 5M-PUR | 10 |
| | 10.0 | 458510 | KUW3-M8 (C) 10M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 2.0 | 458602 | KUW4-M8 (C) 2M-PUR | 10 |
| | 5.0 | 458605 | KUW4-M8 (C) 5M-PUR | 10 |
| | 10.0 | 458610 | KUW4-M8 (C) 10M-PUR | 10 |

| Technical data | 3-pole | | | 4-pole | | |
|--|------------------------------------|------|------|------------------------------------|------|------|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 30 V | | | | | |
| Rated current | 3 A | | | | | |
| Number of terminations | 3 | | | 4 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | - | | | | | |
| Shielding | 360° | | | | | |
| General | | | | | | |
| Design | M8 x 1, female angled | | | | | |
| Rated insulation voltage (EN 50178) | 100 V | | | | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | < 5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | NBR | | | | | |
| Cable construction | 3 x 0.25mm ² (32 x 0.1) | | | 4 x 0.25mm ² (32 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 5.0 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.08 | 0.20 | 0.39 | 0.09 | 0.21 | 0.40 |
| Approvals | cULus | | | | | |

| Accessories | Article number | Type | Pkg. units |
|------------------------|----------------|-----------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 |

Action chart

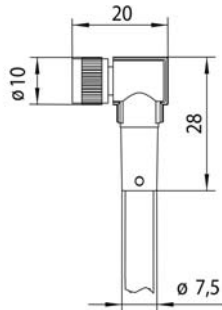


Actuator sensor interface - M8 – cables

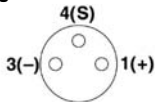
Female M8 angled with 2 LED's and PUR cable, open end self-locking screwed connection c-track compatible



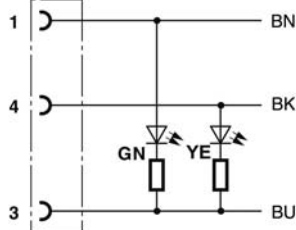
Dimensions



PIN assignment



Circuit diagram



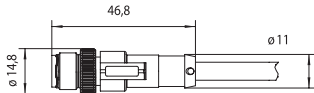
| Description | Part-No. | Type | PU |
|--|--|----------------------|-------------------|
| 3-pole | | | |
| Cable length | 2.0 | KUW/LED A-M8 2M-PUR | 10 |
| | 5.0 | KUW/LED A-M8 5M-PUR | 10 |
| | 10.0 | KUW/LED A-M8 10M-PUR | 10 |
| Technical data | | | |
| | | 3-pole | |
| Rated voltage | DC 24 V | | |
| Nominal voltage range | DC 10 – 30 V | | |
| Rated current | 3 A | | |
| Number of terminations | 3 | | |
| Cable length | 2.0 | 5.0 | 10.0 |
| Status indication | Operating voltage: LED green; I/O:LED yellow | | |
| Current consumption per LED | < 10 mA / LED | | |
| Coding | – | | |
| Shielding | – | | |
| General | | | |
| Design | M8 x 1, female angled, with 2 LEDs | | |
| Rated insulation voltage (EN 50178) | 32 V | | |
| Test voltage | – | | |
| Pollution degree | 3 | | |
| Insulation resistance | >10 ⁹ Ω | | |
| Contact resistance | < 5 mΩ | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 67, in screwed condition | | |
| Housing material | TPU black | | |
| Contact material | CuSn, gold plated nickel | | |
| Thread material | CuSn nickel plated | | |
| Gasket | NBR | | |
| Cable construction | 3 x 0.25mm ² (32 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | |
| Conductor insulation | PVC coloured | | |
| Cable diameter | 4.4 mm | | |
| Bending radius | 15 x cable diameter | | |
| Storage temperature range | -30 °C – 90 °C | | |
| Temperature range connector | -25 °C – 90 °C | | |
| Temperature range cable fixed | -25 °C – 80 °C | | |
| Temperature range cable moving | -5 °C – 80 °C | | |
| Mechanical service life | – | | |
| Weight (kg/piece) | 0.05 | 0.14 | 0.27 |
| Approvals | cULus | | |
| Accessories | | | |
| | Article number | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 |

Actuator sensor interface - M12 – cables

Male M12 straight with PUR cable, open end self-locking screwed connection c-track compatible

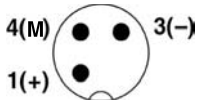


Dimensions



PIN assignment

471020, 471050, 471100

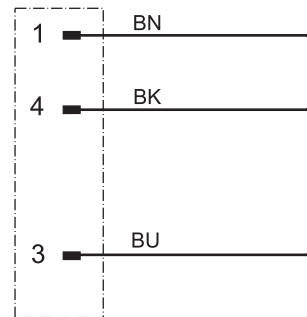


472020, 472050, 472100

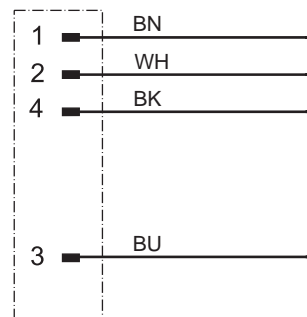


Circuit diagram

471020, 471050, 471100



472020, 472050, 472100



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|------------------|----|
| 3-pole | | | | |
| Cable length | 2.0 | 471020 | STG3-M12 2M-PUR | 10 |
| | 5.0 | 471050 | STG3-M12 5M-PUR | 10 |
| | 10.0 | 471100 | STG3-M12 10M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 2.0 | 472020 | STG4-M12 2M-PUR | 10 |
| | 5.0 | 472050 | STG4-M12 5M-PUR | 10 |
| | 10.0 | 472100 | STG4-M12 10M-PUR | 10 |

| Technical data | 3-pole | 4-pole |
|-----------------------------|--------------|--------------|
| Rated voltage | AC/DC 24 V | |
| Nominal voltage range | max. 250 V | |
| Rated current | 4 A | |
| Number of terminations | 3 | 4 |
| Cable length | 2.0 5.0 10.0 | 2.0 5.0 10.0 |
| Status indication | - | |
| Current consumption per LED | - | |
| Coding | A | |
| Shielding | - | |

| General | |
|--|---|
| Design | M12 x 1, male straight |
| Rated insulation voltage (EN 50178) | 250 V |
| Test voltage | 2.5 kV |
| Pollution degree | 3 |
| Insulation resistance | >10 ⁹ Ω |
| Contact resistance | <5 mΩ |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 67, in screwed condition |
| Housing material | TPU black |
| Contact material | CuSn, gold plated nickel |
| Thread material | CuSn nickel plated |
| Gasket | - |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) 4 x 0.34 mm ² (42 x 0.1) |
| Cable jacket | PUR, RAL 9001 black |
| Conductor insulation | PVC coloured |
| Cable diameter | 4.4 mm 4.7 mm |
| Bending radius | 15 x cable diameter |
| Storage temperature range | -30 °C – 90 °C |
| Temperature range connector | -25 °C – 90 °C |
| Temperature range cable fixed | -25 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Mechanical service life | - |
| Weight (kg/piece) | 0.090 0.190 0.380 0.100 0.200 0.400 |

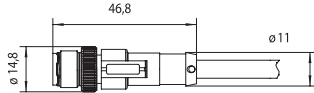
| Approvals | cULus | | |
|-------------------------|----------------|------------|------------|
| Accessories | Article number | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - M12 – cables

Male M12 straight with PUR cable, open end self-locking screwed connection c-track compatible



Dimensions



PIN assignment

473020, 473050, 473100

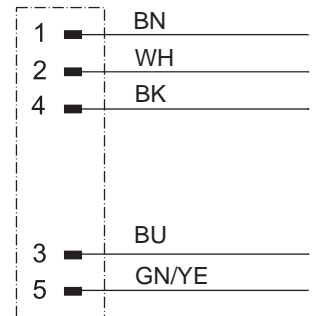


482020, 482050, 482100

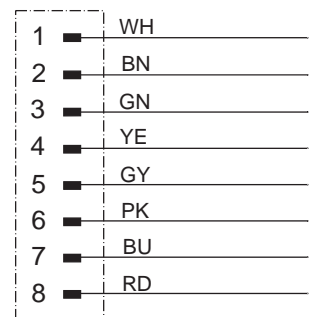


Circuit diagram

473020, 473050, 473100



482020, 482050, 482100



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|------------------|----|
| 5-pole | | | | |
| Cable length | 2.0 | 473020 | STG5-M12 2M-PUR | 10 |
| | 5.0 | 473050 | STG5-M12 5M-PUR | 10 |
| | 10.0 | 473100 | STG5-M12 10M-PUR | 10 |
| 8-pole | | | | |
| Cable length | 2.0 | 482020 | STG8-M12 2M-PUR | 10 |
| | 5.0 | 482050 | STG8-M12 5M-PUR | 10 |
| | 10.0 | 482100 | STG8-M12 10M-PUR | 10 |

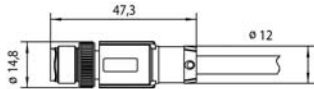
| Technical data | 5-pole | | | 8-pole | | |
|--|-------------------------------------|-------|------------|-------------------------------------|------------|-------|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 60 V | | | max. 30 V | | |
| Rated current | max. 4 A per contact | | | max. 2 A per contact | | |
| Number of terminations | 5 | | | 8 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | A | | | | | |
| Shielding | - | | | | | |
| General | | | | | | |
| Design | M12 x 1, male straight | | | | | |
| Rated insulation voltage (EN 50178) | 63 V | | | 36 V | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | <5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | | | |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) | | | 8 x 0.25 mm ² (32 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 5.0 mm | | | 5.9 mm | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.100 | 0.250 | 0.480 | 0.110 | 0.260 | 0.525 |
| Approvals | cULus | | | | | |
| Accessories | | | | | | |
| | Article number | | Type | | Pkg. units | |
| Cable markers 4x23mm | 499988 | | LB M8/M12 | | 5 | |
| Torque setting tool M12 | 490091 | | DM-SET M12 | | 1 | |

Actuator sensor interface - M12 – cables

Male M12 straight with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible

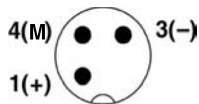


Dimensions



PIN assignment

456002, 456005, 456010

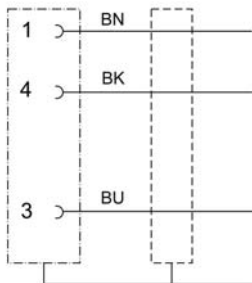


456102, 456105, 456110

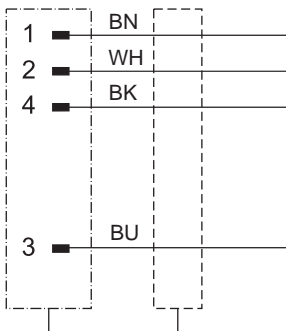


Circuit diagram

456002, 456005, 456010



456102, 456105, 456110

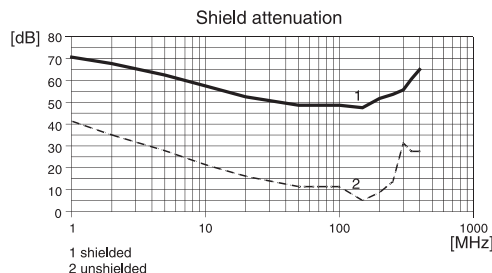


| Description | Part-No. | Type | PU | |
|---------------|----------|--------|----------------------|----|
| 3-pole | | | | |
| Cable length | 2.0 | 456002 | STG3-M12 (C) 2M-PUR | 10 |
| | 5.0 | 456005 | STG3-M12 (C) 5M-PUR | 10 |
| | 10.0 | 456010 | STG3-M12 (C) 10M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 2.0 | 456102 | STG4-M12 (C) 2M-PUR | 10 |
| | 5.0 | 456105 | STG4-M12 (C) 5M-PUR | 10 |
| | 10.0 | 456110 | STG4-M12 (C) 10M-PUR | 10 |

| Technical data | 3-pole | | | 4-pole | | |
|--|-------------------------------------|-------|-------|-------------------------------------|-------|-------|
| Rated voltage | | | | AC/DC 24 V | | |
| Nominal voltage range | | | | max. 250 V | | |
| Rated current | | | | 4 A | | |
| Number of terminations | 3 | | | 4 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | | | | - | | |
| Current consumption per LED | | | | - | | |
| Coding | | | | A | | |
| Shielding | | | | - | | |
| General | | | | | | |
| Design | M12 x 1, male straight | | | | | |
| Rated insulation voltage (EN 50178) | 250 V | | | | | |
| Test voltage | 2.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | <5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | | | |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) | | | 4 x 0.34 mm ² (42 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 5.9 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.115 | 0.225 | 0.420 | 0.125 | 0.275 | 0.520 |
| Approvals | cULus | | | | | |

| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Action chart

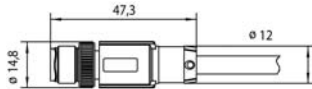


Actuator sensor interface - M12 – cables

Male M12 straight with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible



Dimensions



PIN assignment

456202, 456205, 456210

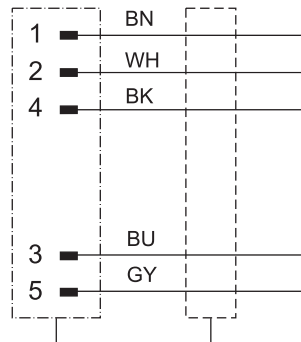


458702, 458705, 458710

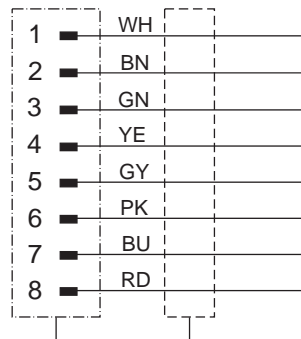


Circuit diagram

456202, 456205, 456210



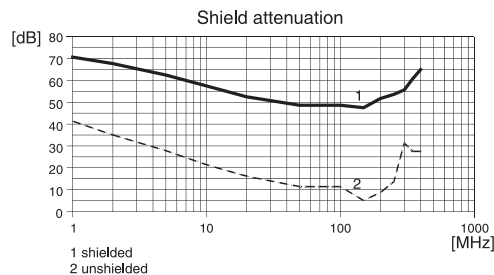
458702, 458705, 458710



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|----------------------|----|
| 5-pole | | | | |
| Cable length | 2.0 | 456202 | STG5-M12 (C) 2M-PUR | 10 |
| | 5.0 | 456205 | STG5-M12 (C) 5M-PUR | 10 |
| | 10.0 | 456210 | STG5-M12 (C) 10M-PUR | 10 |
| 8-pole | | | | |
| Cable length | 2.0 | 458702 | STG8-M12 (C) 2M-PUR | 10 |
| | 5.0 | 458705 | STG8-M12 (C) 5M-PUR | 10 |
| | 10.0 | 458710 | STG8-M12 (C) 10M-PUR | 10 |

| Technical data | 5-pole | 8-pole | |
|--|-------------------------------------|-------------------------------------|-------------------|
| Rated voltage | AC/DC 24 V | | |
| Nominal voltage range | max. 60 V | max. 30 V | |
| Rated current | max. 4 A per contact | max. 2 A per contact | |
| Number of terminations | 5 | 8 | |
| Cable length | 2.0 5.0 10.0 | 2.0 5.0 10.0 | |
| Status indication | - | | |
| Current consumption per LED | - | | |
| Coding | A | | |
| Shielding | - | | |
| General | | | |
| Design | M12 x 1, male straight | | |
| Rated insulation voltage (EN 50178) | 63 V | 36 V | |
| Test voltage | 1.5 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | >10 ⁹ Ω | | |
| Contact resistance | <5 mΩ | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 67, in screwed condition | | |
| Housing material | TPU black | | |
| Contact material | CuSn, gold plated nickel | | |
| Thread material | CuSn nickel plated | | |
| Gasket | - | | |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) | 8 x 0.25 mm ² (32 x 0.1) | |
| Cable jacket | PUR, RAL 9001 black | | |
| Conductor insulation | PVC coloured | | |
| Cable diameter | 5.9 mm | | |
| Bending radius | cable diameter | | |
| Storage temperature range | -30 °C – 90 °C | | |
| Temperature range connector | -25 °C – 90 °C | | |
| Temperature range cable fixed | -25 °C – 80 °C | | |
| Temperature range cable moving | -5 °C – 80 °C | | |
| Mechanical service life | - | | |
| Weight (kg/piece) | 0.150 0.300 0.565 | 0.155 0.305 0.570 | |
| Approvals | cULus | | |
| Accessories | | | |
| | Article number | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Action chart

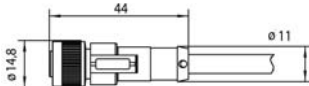


Actuator sensor interface - M12 – cables

Male M12 straight with PUR cable, open end self-locking screwed connection c-track compatible



Dimensions



PIN assignment

465020, 465050, 465100

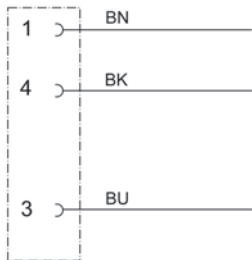


466020, 466050, 466100



Circuit diagram

465020, 465050, 465100



466020, 466050, 466100



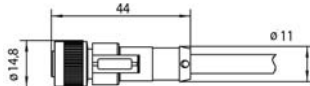
| Description | Part-No. | | | Type | | | PU |
|--|-------------------------------------|--------|------------------|-------------------------------------|-------|-------------------|----|
| 3-pole | | | | | | | |
| Cable length | 2.0 | 465020 | KUG3-M12 2M-PUR | | | | 10 |
| | 5.0 | 465050 | KUG3-M12 5M-PUR | | | | 10 |
| | 10.0 | 465100 | KUG3-M12 10M-PUR | | | | 10 |
| 4-pole | | | | | | | |
| Cable length | 2.0 | 466020 | KUG4-M12 2M-PUR | | | | 10 |
| | 5.0 | 466050 | KUG4-M12 5M-PUR | | | | 10 |
| | 10.0 | 466100 | KUG4-M12 10M-PUR | | | | 10 |
| Technical data | | | | | | | |
| | 3-pole | | | 4-pole | | | |
| Rated voltage | | | | AC/DC 24 V | | | |
| Nominal voltage range | | | | max. 250 V | | | |
| Rated current | | | | 4 A | | | |
| Number of terminations | 3 | | | 4 | | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 | |
| Status indication | | | | - | | | |
| Current consumption per LED | | | | - | | | |
| Coding | | | | A | | | |
| Shielding | | | | - | | | |
| General | | | | | | | |
| Design | | | | M12 x 1, female straight | | | |
| Rated insulation voltage (EN 50178) | | | | 250 V | | | |
| Test voltage | | | | 2.5 kV | | | |
| Pollution degree | | | | 3 | | | |
| Insulation resistance | | | | >10 ⁹ Ω | | | |
| Contact resistance | | | | <5 mΩ | | | |
| Class of flammability according to UL 94 | | | | V0 | | | |
| IP rating | | | | IP 67, in screwed condition | | | |
| Housing material | | | | TPU black | | | |
| Contact material | | | | CuSn, gold plated nickel | | | |
| Thread material | | | | CuSn nickel plated | | | |
| Gasket | | | | - | | | |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) | | | 4 x 0.34 mm ² (42 x 0.1) | | | |
| Cable jacket | | | | PUR, RAL 9001 black | | | |
| Conductor insulation | | | | PVC coloured | | | |
| Cable diameter | 4.4 mm | | | 4.7 mm | | | |
| Bending radius | | | | 15 x cable diameter | | | |
| Storage temperature range | | | | -30 °C – 90 °C | | | |
| Temperature range connector | | | | -25 °C – 90 °C | | | |
| Temperature range cable fixed | | | | -25 °C – 80 °C | | | |
| Temperature range cable moving | | | | -5 °C – 80 °C | | | |
| Mechanical service life | | | | - | | | |
| Weight (kg/piece) | 0.090 | 0.190 | 0.380 | 0.100 | 0.200 | 0.400 | |
| Approvals | | | | cULus | | | |
| Accessories | | | | | | | |
| | Article number | | | Type | | Pkg. units | |
| Cable markers 4x23mm | 499988 | | | LB M8/M12 | | 5 | |
| Torque setting tool M12 | 490091 | | | DM-SET M12 | | 1 | |

Actuator sensor interface - M12 – cables

Female M12 straight with PUR cable, open end self-locking screwed connection c-track compatible

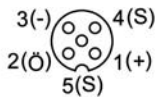


Dimensions



PIN assignment

477020, 477050, 477100

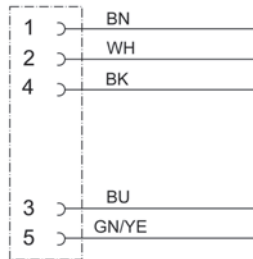


478020, 478050, 478100

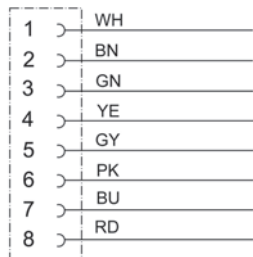


Circuit diagram

477020, 477050, 477100



478020, 478050, 478100



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|------------------|----|
| 5-pole | | | | |
| Cable length | 2.0 | 477020 | KUG5-M12 2M-PUR | 10 |
| | 5.0 | 477050 | KUG5-M12 5M-PUR | 10 |
| | 10.0 | 477100 | KUG5-M12 10M-PUR | 10 |
| 8-pole | | | | |
| Cable length | 2.0 | 478020 | KUG8-M12 2M-PUR | 10 |
| | 5.0 | 478050 | KUG8-M12 5M-PUR | 10 |
| | 10.0 | 478100 | KUG8-M12 10M-PUR | 10 |

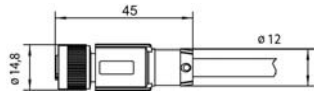
| Technical data | 5-pole | | | 8-pole | | |
|--|-------------------------------------|-------|------------|-------------------------------------|------------|-------|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 60 V | | | max. 30 V | | |
| Rated current | max. 4 A per contact | | | max. 2 A per contact | | |
| Number of terminations | 5 | | | 8 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | A | | | | | |
| Shielding | - | | | | | |
| General | | | | | | |
| Design | M12 x 1, female straight | | | | | |
| Rated insulation voltage (EN 50178) | 63 V | | | 36 V | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | <5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | | | |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) | | | 8 x 0.25 mm ² (32 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 5.0 mm | | | 5.9 mm | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.100 | 0.250 | 0.480 | 0.110 | 0.260 | 0.525 |
| Approvals | cULus | | | | | |
| Accessories | | | | | | |
| | Article number | | Type | | Pkg. units | |
| Cable markers 4x23mm | 499988 | | LB M8/M12 | | 5 | |
| Torque setting tool M12 | 490091 | | DM-SET M12 | | 1 | |

Actuator sensor interface - M12 – cables

Female M12 straight with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible



Dimensions



PIN assignment

456302, 456305, 456310

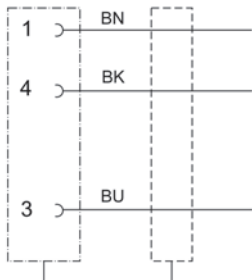


456402, 456405, 456410

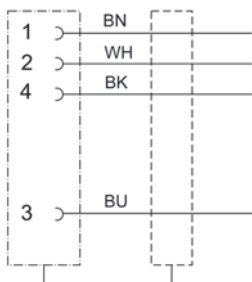


Circuit diagram

456302, 456305, 456310



456402, 456405, 456410

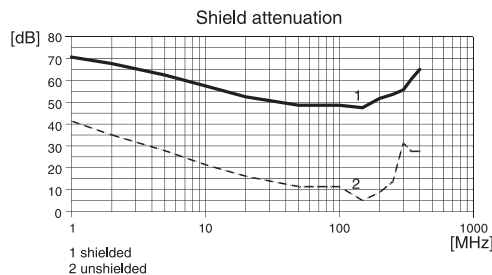


| Description | Part-No. | Type | PU | |
|---------------|----------|--------|----------------------|----|
| 3-pole | | | | |
| Cable length | 2.0 | 456302 | KUG3-M12 (C) 2M-PUR | 10 |
| | 5.0 | 456305 | KUG3-M12 (C) 5M-PUR | 10 |
| | 10.0 | 456310 | KUG3-M12 (C) 10M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 2.0 | 456402 | KUG4-M12 (C) 2M-PUR | 10 |
| | 5.0 | 456405 | KUG4-M12 (C) 5M-PUR | 10 |
| | 10.0 | 456410 | KUG4-M12 (C) 10M-PUR | 10 |

| Technical data | 3-pole | | | 4-pole | | |
|--|-------------------------------------|-------|-------|-------------------------------------|-------|-------|
| Rated voltage | | | | AC/DC 24 V | | |
| Nominal voltage range | | | | max. 250 V | | |
| Rated current | | | | 4 A | | |
| Number of terminations | 3 | | | 4 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | | | | - | | |
| Current consumption per LED | | | | - | | |
| Coding | | | | A | | |
| Shielding | | | | - | | |
| General | | | | | | |
| Design | M12 x 1, female straight | | | | | |
| Rated insulation voltage (EN 50178) | 250 V | | | | | |
| Test voltage | 2.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | <5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 65, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | | | |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) | | | 4 x 0.34 mm ² (42 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 5.9 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.115 | 0.225 | 0.420 | 0.125 | 0.275 | 0.520 |

| Approvals | cULus | | |
|-------------------------|----------------|------------|------------|
| Accessories | Article number | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Action chart

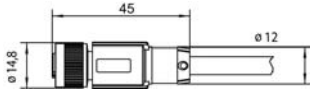


Actuator sensor interface - M12 – cables

Female M12 straight with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible

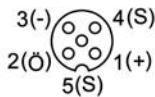


Dimensions



PIN assignment

456502, 456505, 456510

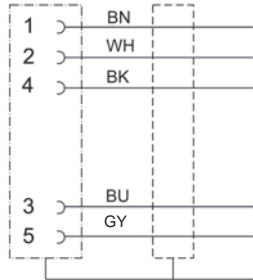


458802, 458805, 458810

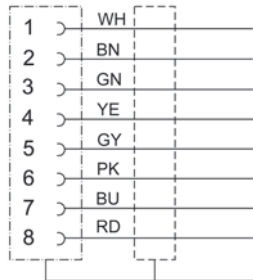


Circuit diagram

456502, 456505, 456510



458802, 458805, 458810

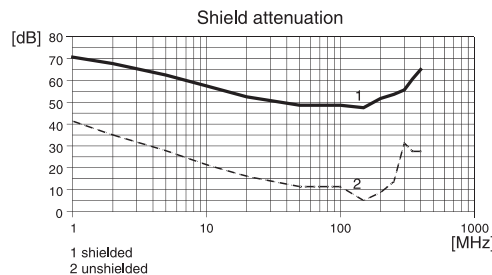


| Description | Part-No. | Type | PU | |
|---------------|----------|--------|----------------------|----|
| 5-pole | | | | |
| Cable length | 2.0 | 456502 | KUG5-M12 (C) 2M-PUR | 10 |
| | 5.0 | 456505 | KUG5-M12 (C) 5M-PUR | 10 |
| | 10.0 | 456510 | KUG5-M12 (C) 10M-PUR | 10 |
| 8-pole | | | | |
| Cable length | 2.0 | 458802 | KUG8-M12 (C) 2M-PUR | 10 |
| | 5.0 | 458805 | KUG8-M12 (C) 5M-PUR | 10 |
| | 10.0 | 458810 | KUG8-M12 (C) 10M-PUR | 10 |

| Technical data | 5-pole | 8-pole |
|--|-------------------------------------|-------------------------------------|
| Rated voltage | AC/DC 24 V | |
| Nominal voltage range | max. 60 V | max. 30 V |
| Rated current | max. 4 A per contact | max. 2 A per contact |
| Number of terminations | 5 | 8 |
| Cable length | 2.0 5.0 10.0 | 2.0 5.0 10.0 |
| Status indication | - | |
| Current consumption per LED | - | |
| Coding | A | |
| Shielding | - | |
| General | | |
| Design | M12 x 1, female straight | |
| Rated insulation voltage (EN 50178) | 63 V | 36 V |
| Test voltage | 1.5 kV | |
| Pollution degree | 3 | |
| Insulation resistance | >10 ⁹ Ω | |
| Contact resistance | <5 mΩ | |
| Class of flammability according to UL 94 | V0 | |
| IP rating | IP 67, in screwed condition | |
| Housing material | TPU black | |
| Contact material | CuSn, gold plated nickel | |
| Thread material | CuSn nickel plated | |
| Gasket | - | |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) | 8 x 0.25 mm ² (32 x 0.1) |
| Cable jacket | PUR, RAL 9001 black | |
| Conductor insulation | PVC coloured | |
| Cable diameter | 5.9 mm | |
| Bending radius | 15 x cable diameter | |
| Storage temperature range | -30 °C – 90 °C | |
| Temperature range connector | -25 °C – 90 °C | |
| Temperature range cable fixed | -25 °C – 80 °C | |
| Temperature range cable moving | -5 °C – 80 °C | |
| Mechanical service life | - | |
| Weight (kg/piece) | 0.150 0.300 0.565 | 0.150 0.305 0.570 |
| Approvals | cULus | |

| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Action chart

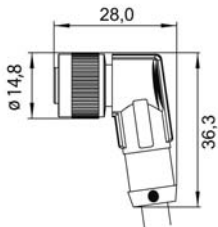


Actuator sensor interface - M12 – cables

Female M12 angled with PUR cable, open end self-locking screwed connection c-track compatible



Dimensions



PIN assignment

462020, 462050, 462100

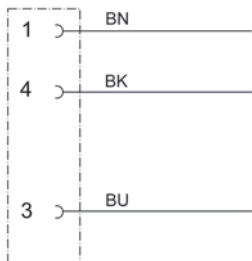


464020, 464050, 464100



Circuit diagram

462020, 462050, 462100



464020, 464050, 464100



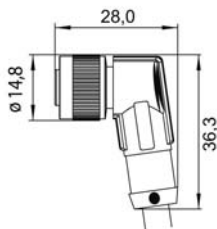
| Description | Part-No. | | | Type | PU |
|--|-------------------------------------|--------|------------------|-------------------------------------|-------------------|
| 3-pole | | | | | |
| Cable length | 2.0 | 462020 | KUW3-M12 2M-PUR | 10 | |
| | 5.0 | 462050 | KUW3-M12 5M-PUR | 10 | |
| | 10.0 | 462100 | KUW3-M12 10M-PUR | 10 | |
| 4-pole | | | | | |
| Cable length | 2.0 | 464020 | KUW4-M12 2M-PUR | 10 | |
| | 5.0 | 464050 | KUW4-M12 5M-PUR | 10 | |
| | 10.0 | 464100 | KUW4-M12 10M-PUR | 10 | |
| Technical data | | | | | |
| | 3-pole | | | 4-pole | |
| Rated voltage | | | | AC/DC 24 V | |
| Nominal voltage range | | | | max. 250 V | |
| Rated current | | | | 4 A | |
| Number of terminations | 3 | | | 4 | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 10.0 |
| Status indication | | | | - | |
| Current consumption per LED | | | | - | |
| Coding | | | | A | |
| Shielding | | | | - | |
| General | | | | | |
| Design | | | | M12 x 1, female angled | |
| Rated insulation voltage (EN 50178) | | | | 250 V | |
| Test voltage | | | | 2.5 kV | |
| Pollution degree | | | | 3 | |
| Insulation resistance | | | | >10 ⁹ Ω | |
| Contact resistance | | | | <5 mΩ | |
| Class of flammability according to UL 94 | | | | V0 | |
| IP rating | | | | IP 67, in screwed condition | |
| Housing material | | | | TPU black | |
| Contact material | | | | CuSn, gold plated nickel | |
| Thread material | | | | CuSn nickel plated | |
| Gasket | | | | NBR | |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) | | | 4 x 0.34 mm ² (42 x 0.1) | |
| Cable jacket | | | | PUR, RAL 9001 black | |
| Conductor insulation | | | | PVC coloured | |
| Cable diameter | 4.4 mm | | | 4.7 mm | |
| Bending radius | | | | 15 x cable diameter | |
| Storage temperature range | | | | -30 °C – 90 °C | |
| Temperature range connector | | | | -25 °C – 90 °C | |
| Temperature range cable fixed | | | | -25 °C – 80 °C | |
| Temperature range cable moving | | | | -5 °C – 80 °C | |
| Mechanical service life | | | | - | |
| Weight (kg/piece) | 0.090 | 0.190 | 0.380 | 0.100 | 0.200 0.400 |
| Approvals | | | | cULus | |
| Accessories | | | | | |
| | Article number | | | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | | | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | | | DM-SET M12 | 1 |

Actuator sensor interface - M12 – cables

Female M12 angled with PUR cable, open end self-locking screwed connection c-track compatible

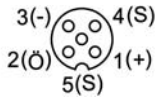


Dimensions



PIN assignment

443020, 443050, 443100

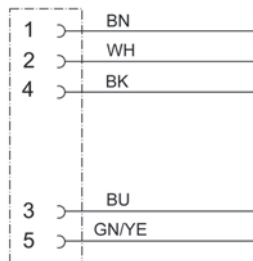


479020, 479050, 479100

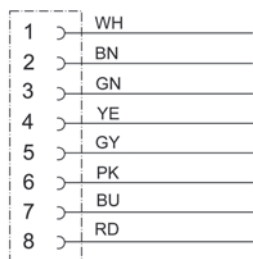


Circuit diagram

443020, 443050, 443100



479020, 479050, 479100



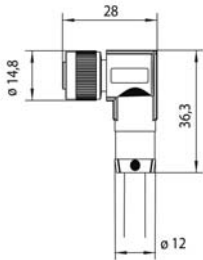
| Description | Part-No. | Type | PU | | | |
|--|-------------------------------------|--------|-------------------------------------|-------|-------------------|-------|
| 5-pole | | | | | | |
| Cable length | 2.0 | 443020 | KUW5-M12 2M-PUR | 10 | | |
| | 5.0 | 443050 | KUW5-M12 5M-PUR | 10 | | |
| | 10.0 | 443100 | KUW5-M12 10M-PUR | 10 | | |
| 8-pole | | | | | | |
| Cable length | 2.0 | 479020 | KUW8-M12 2M-PUR | 10 | | |
| | 5.0 | 479050 | KUW8-M12 5M-PUR | 10 | | |
| | 10.0 | 479100 | KUW8-M12 10M-PUR | 10 | | |
| Technical data | | | | | | |
| | 5-pole | | 8-pole | | | |
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 60 V | | max. 30 V | | | |
| Rated current | max. 4 A per contact | | max. 2 A per contact | | | |
| Number of terminations | 5 | | 8 | | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | A | | | | | |
| Shielding | - | | | | | |
| General | | | | | | |
| Design | M12 x 1, female angled | | | | | |
| Rated insulation voltage (EN 50178) | 63 V | | 36 V | | | |
| Test voltage | 1.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | <5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | NBR | | | | | |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) | | 8 x 0.25 mm ² (32 x 0.1) | | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 5.0 mm | | 5.9 mm | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.100 | 0.250 | 0.480 | 0.110 | 0.260 | 0.525 |
| Approvals | cULus | | | | | |
| Accessories | | | | | | |
| | Article number | | Type | | Pkg. units | |
| Cable markers 4x23mm | 499988 | | LB M8/M12 | | 5 | |
| Torque setting tool M12 | 490091 | | DM-SET M12 | | 1 | |

Actuator sensor interface - M12 – cables

Female M12 angled with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible



Dimensions



PIN assignment

456602, 456605, 456610

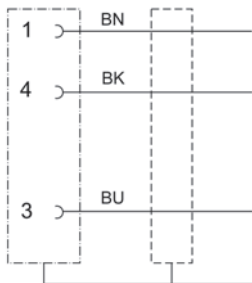


456702, 456705, 456710

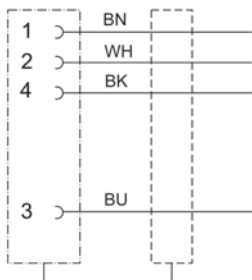


Circuit diagram

456602, 456605, 456610



456702, 456705, 456710

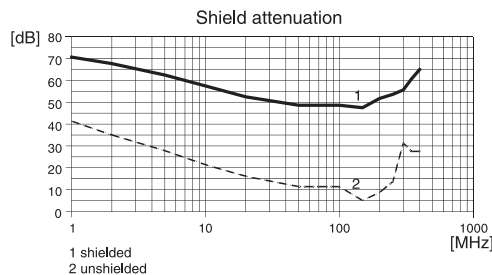


| Description | Part-No. | Type | PU | |
|---------------|----------|--------|----------------------|----|
| 3-pole | | | | |
| Cable length | 2.0 | 456602 | KUW3-M12 (C) 2M-PUR | 10 |
| | 5.0 | 456605 | KUW3-M12 (C) 5M-PUR | 10 |
| | 10.0 | 456610 | KUW3-M12 (C) 10M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 2.0 | 456702 | KUW4-M12 (C) 2M-PUR | 10 |
| | 5.0 | 456705 | KUW4-M12 (C) 5M-PUR | 10 |
| | 10.0 | 456710 | KUW4-M12 (C) 10M-PUR | 10 |

| Technical data | 3-pole | | | 4-pole | | |
|--|-------------------------------------|-------|-------|-------------------------------------|-------|-------|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 250 V | | | | | |
| Rated current | 4 A | | | | | |
| Number of terminations | 3 | | | 4 | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | A | | | | | |
| Shielding | 360° | | | | | |
| General | | | | | | |
| Design | M12 x 1, female angled | | | | | |
| Rated insulation voltage (EN 50178) | 250 V | | | | | |
| Test voltage | 2.5 kV | | | | | |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | |
| Contact resistance | <5 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | TPU black | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | NBR | | | | | |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) | | | 4 x 0.34 mm ² (42 x 0.1) | | |
| Cable jacket | PUR, RAL 9001 black | | | | | |
| Conductor insulation | PVC coloured | | | | | |
| Cable diameter | 5.9 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | |
| Mechanical service life | - | | | | | |
| Weight (kg/piece) | 0.115 | 0.225 | 0.420 | 0.125 | 0.275 | 0.520 |
| Approvals | cULus | | | | | |

| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Action chart

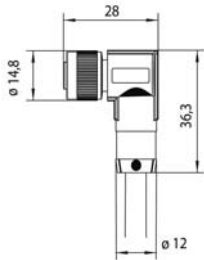


Actuator sensor interface - M12 – cables

Female M12 angled with PUR cable, shielded 360°, open end self-locking screwed connection
c-track compatible

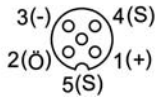


Dimensions



PIN assignment

456802, 456805, 456810

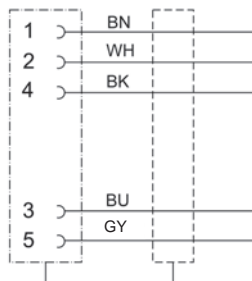


458902, 458905, 458910

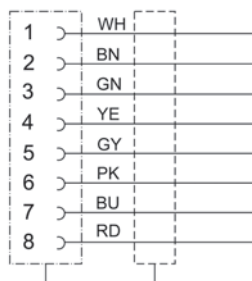


Circuit diagram

456802, 456805, 456810

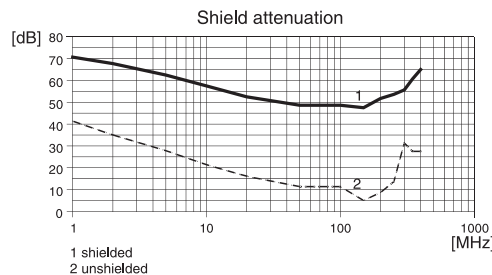


458902, 458905, 458910



| Description | Part-No. | | | Type | | | PU |
|--|-------------------------------------|--------|----------------------|-------------------------------------|-------|-------|-------------------|
| 5-pole | | | | | | | |
| Cable length | 2.0 | 456802 | KUW5-M12 (C) 2M-PUR | | | | 10 |
| | 5.0 | 456805 | KUW5-M12 (C) 5M-PUR | | | | 10 |
| | 10.0 | 456810 | KUW5-M12 (C) 10M-PUR | | | | 10 |
| 8-pole | | | | | | | |
| Cable length | 2.0 | 458902 | KUW8-M12 (C) 2M-PUR | | | | 10 |
| | 5.0 | 458905 | KUW8-M12 (C) 5M-PUR | | | | 10 |
| | 10.0 | 458910 | KUW8-M12 (C) 10M-PUR | | | | 10 |
| Technical data | | | | | | | |
| | 5-pole | | | 8-pole | | | |
| Rated voltage | AC/DC 24 V | | | | | | |
| Nominal voltage range | max. 60 V | | | max. 30 V | | | |
| Rated current | max. 4 A per contact | | | max. 2 A per contact | | | |
| Number of terminations | 5 | | | 8 | | | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 | 10.0 | |
| Status indication | - | | | | | | |
| Current consumption per LED | - | | | | | | |
| Coding | A | | | | | | |
| Shielding | 360° | | | | | | |
| General | | | | | | | |
| Design | M12 x 1, female angled | | | | | | |
| Rated insulation voltage (EN 50178) | 63 V | | | 36 V | | | |
| Test voltage | 1.5 kV | | | | | | |
| Pollution degree | 3 | | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | | |
| Contact resistance | <5 mΩ | | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | | |
| IP rating | IP 67, in screwed condition | | | | | | |
| Housing material | TPU black | | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | | |
| Thread material | CuSn nickel plated | | | | | | |
| Gasket | NBR | | | | | | |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) | | | 8 x 0.25 mm ² (32 x 0.1) | | | |
| Cable jacket | PUR, RAL 9001 black | | | | | | |
| Conductor insulation | PVC coloured | | | | | | |
| Cable diameter | 5.9 mm | | | | | | |
| Bending radius | 15 x cable diameter | | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | | |
| Mechanical service life | - | | | | | | |
| Weight (kg/piece) | 0.150 | 0.300 | 0.565 | 0.155 | 0.305 | 0.570 | |
| Approvals | cULus | | | | | | |
| Accessories | | | | | | | |
| | Article number | | | Type | | | Pkg. units |
| Cable markers 4x23mm | 499988 | | | LB M8/M12 | | | 5 |
| Torque setting tool M12 | 490091 | | | DM-SET M12 | | | 1 |

Action chart

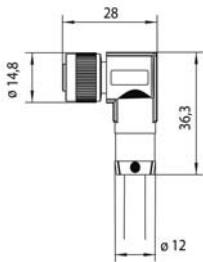


Actuator sensor interface - M12 – cables

Female M12 angled, with LEDs and PUR cable, open end self-locking screwed connection c-track compatible



Dimensions



PIN assignment

468020, 468050, 468100

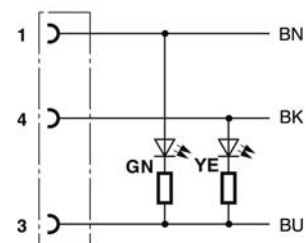


469020, 469050, 469100

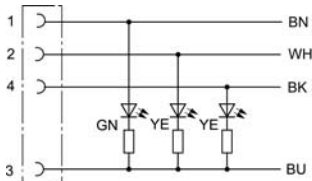


Circuit diagram

468020, 468050, 468100



469020, 469050, 469100



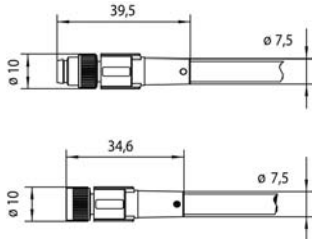
| Description | Part-No. | | | Type | PU |
|--|---|--------|-----------------------|-------------------------------------|-------------------|
| 3-pole | | | | | |
| Cable length | 2.0 | 468020 | KUW/LED A-M12 2M-PUR | 10 | |
| | 5.0 | 468050 | KUW/LED A-M12 5M-PUR | 10 | |
| | 10.0 | 468100 | KUW/LED A-M12 10M-PUR | 10 | |
| 4-pole | | | | | |
| Cable length | 2.0 | 469020 | KUW/LED P-M12 2M-PUR | 10 | |
| | 5.0 | 469050 | KUW/LED P-M12 5M-PUR | 10 | |
| | 10.0 | 469100 | KUW/LED P-M12 10M-PUR | 10 | |
| Technical data | | | | | |
| | 3-pole | | | 4-pole | |
| Rated voltage | AC/DC 24 V | | | | |
| Nominal voltage range | DC 10 – 30 V | | | | |
| Rated current | 4 A | | | | |
| Number of terminations | 3 | | | 4 | |
| Cable length | 2.0 | 5.0 | 10.0 | 2.0 | 5.0 10.0 |
| Status indication | Operating voltage: LED green, I/O: LED yellow | | | | |
| Current consumption per LED | <10 mA / LED | | | | |
| Coding | A | | | | |
| Shielding | – | | | | |
| General | | | | | |
| Design | M12 x 1, female angled, with LEDs | | | | |
| Rated insulation voltage (EN 50178) | 32 V | | | | |
| Test voltage | – | | | | |
| Pollution degree | 3 | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | |
| Contact resistance | <5 mΩ | | | | |
| Class of flammability according to UL 94 | V0 | | | | |
| IP rating | IP 67, in screwed condition | | | | |
| Housing material | TPU black | | | | |
| Contact material | CuSn, gold plated nickel | | | | |
| Thread material | CuSn nickel plated | | | | |
| Gasket | NBR | | | | |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) | | | 4 x 0.34 mm ² (42 x 0.1) | |
| Cable jacket | PUR, RAL 9001 black | | | | |
| Conductor insulation | PVC coloured | | | | |
| Cable diameter | 4.4 mm | | | 4.7 mm | |
| Bending radius | 15 x cable diameter | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | |
| Mechanical service life | – | | | | |
| Weight (kg/piece) | 0.095 | 0.190 | 0.370 | 0.100 | 0.200 0.390 |
| Approvals | cULus | | | | |
| Accessories | | | | | |
| | Article number | | | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | | | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | | | DM-SET M12 | 1 |

Actuator sensor interface - M8 / M8 – cables

Male M8 straight to female M8 straight with PUR cable
self-locking screwed connection
c-track compatible

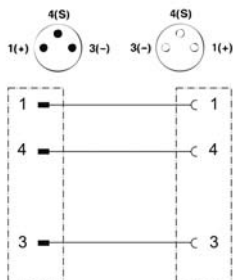


Dimensions

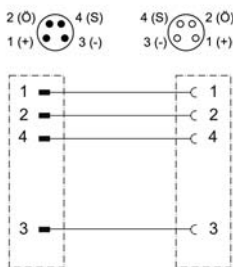


PIN assignment

487003, 487006, 487010, 487015,
487020, 487050



410003, 410006, 410010, 410015,
410020, 410050



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|--------------------------|----|
| 3-pole | | | | |
| Cable length | 0.3 | 487003 | STG3-M8/KUG3-M8 0,3M-PUR | 10 |
| | 0.6 | 487006 | STG3-M8/KUG3-M8 0,6M-PUR | 10 |
| | 1.0 | 487010 | STG3-M8/KUG3-M8 1,0M-PUR | 10 |
| | 1.5 | 487015 | STG3-M8/KUG3-M8 1,5M-PUR | 10 |
| | 2.0 | 487020 | STG3-M8/KUG3-M8 2,0M-PUR | 10 |
| | 5.0 | 487050 | STG3-M8/KUG3-M8 5,0M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 0.3 | 410003 | STG4-M8/KUG4-M8 0,3M-PUR | 10 |
| | 0.6 | 410006 | STG4-M8/KUG4-M8 0,6M-PUR | 10 |
| | 1.0 | 410010 | STG4-M8/KUG4-M8 1,0M-PUR | 10 |
| | 1.5 | 410015 | STG4-M8/KUG4-M8 1,5M-PUR | 10 |
| | 2.0 | 410020 | STG4-M8/KUG4-M8 2,0M-PUR | 10 |
| | 5.0 | 410050 | STG4-M8/KUG4-M8 5,0M-PUR | 10 |

| Technical data | 3-pole | 4-pole |
|-----------------------------|-------------------------|-------------------------|
| Rated voltage | AC/DC 24 V | |
| Nominal voltage range | max. 60 V | max. 30 V |
| Rated current | 3 A | |
| Number of terminations | 3 | 4 |
| Cable length | 0.3 0.6 1.0 1.5 2.0 5.0 | 0.3 0.6 1.0 1.5 2.0 5.0 |
| Status indication | - | |
| Current consumption per LED | - | |
| Coding | - | |
| Shielding | - | |

| General | |
|--|---|
| Design | M8 x 1, male straight / M8 x 1, female straight |
| Rated insulation voltage (EN 50178) | 100 V |
| Test voltage | 1.5 kV |
| Pollution degree | 3 |
| Insulation resistance | >10 ⁹ Ω |
| Contact resistance | <5 mΩ |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 67, in screwed condition |
| Housing material | TPU black |
| Contact material | CuSn, gold plated nickel |
| Thread material | CuSn nickel plated |
| Gasket | NBR |
| Cable construction | 3 x 0.34 mm ² (32 x 0.1) 4 x 0.34 mm ² (32 x 0.1) |
| Cable jacket | PUR, RAL 9001 black |
| Conductor insulation | PVC coloured |
| Cable diameter | 4.4 mm |
| Bending radius | 15 x cable diameter |
| Storage temperature range | -30 °C – 90 °C |
| Temperature range connector | -25 °C – 90 °C |
| Temperature range cable fixed | -25 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Mechanical service life | - |
| Weight (kg/piece) | 0.02 0.03 0.04 0.05 0.06 0.16 0.05 0.06 0.08 0.10 0.13 0.31 |
| Approvals | cULus |

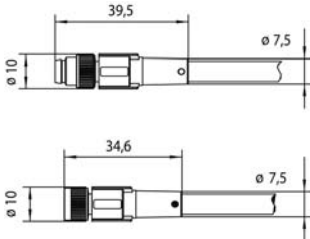
| Accessories | Article number | Type | Pkg. units |
|------------------------|----------------|-----------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 |

Actuator sensor interface - M8 / M8 – cables

Male M8 straight to female M8 straight with PUR cable and 360° shielding
self-locking screwed connection
c-track compatible

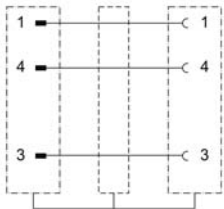
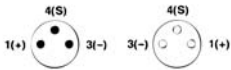


Dimensions

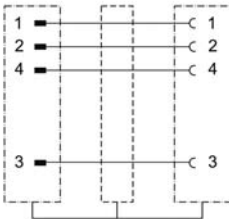


PIN assignment

457603, 457606, 457610, 457615,
457620, 457650



457703, 457706, 457710, 457715,
457720, 457750



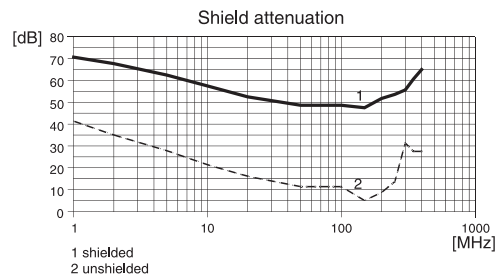
| Description | Part-No. | Type | PU | |
|---------------|----------|--------|------------------------------|----|
| 3-pole | | | | |
| Cable length | 0.3 | 457603 | STG3-M8/KUG3-M8 (C) 0,3M-PUR | 10 |
| | 0.6 | 457606 | STG3-M8/KUG3-M8 (C) 0,6M-PUR | 10 |
| | 1.0 | 457610 | STG3-M8/KUG3-M8 (C) 1,0M-PUR | 10 |
| | 1.5 | 457615 | STG3-M8/KUG3-M8 (C) 1,5M-PUR | 10 |
| | 2.0 | 457620 | STG3-M8/KUG3-M8 (C) 2,0M-PUR | 10 |
| | 5.0 | 457650 | STG3-M8/KUG3-M8 (C) 5,0M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 0.3 | 457703 | STG4-M8/KUG4-M8 (C) 0,3M-PUR | 10 |
| | 0.6 | 457706 | STG4-M8/KUG4-M8 (C) 0,6M-PUR | 10 |
| | 1.0 | 457710 | STG4-M8/KUG4-M8 (C) 1,0M-PUR | 10 |
| | 1.5 | 457715 | STG4-M8/KUG4-M8 (C) 1,5M-PUR | 10 |
| | 2.0 | 457720 | STG4-M8/KUG4-M8 (C) 2,0M-PUR | 10 |
| | 5.0 | 457750 | STG4-M8/KUG4-M8 (C) 5,0M-PUR | 10 |

| Technical data | 3-pole | 4-pole |
|-----------------------------|-------------------------|-------------------------|
| Rated voltage | AC/DC 24 V | |
| Nominal voltage range | max. 60 V | max. 30 V |
| Rated current | 3 A | |
| Number of terminations | 3 | 4 |
| Cable length | 0.3 0.6 1.0 1.5 2.0 5.0 | 0.3 0.6 1.0 1.5 2.0 5.0 |
| Status indication | - | |
| Current consumption per LED | - | |
| Coding | - | |
| Shielding | 360° | |

| General | |
|--|---|
| Design | M8 x 1, male straight / M8 x 1, female straight |
| Rated insulation voltage (EN 50178) | 100 V |
| Test voltage | 1.5 kV |
| Pollution degree | 3 |
| Insulation resistance | >10 ⁹ Ω |
| Contact resistance | <5 mΩ |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 67, in screwed condition |
| Housing material | TPU black |
| Contact material | CuSn, gold plated nickel |
| Thread material | CuSn nickel plated |
| Gasket | NBR |
| Cable construction | 3 x 0.25 mm ² (32 x 0.1) 4 x 0.25 mm ² (32 x 0.1) |
| Cable jacket | PUR, RAL 9001 black |
| Conductor insulation | PVC coloured |
| Cable diameter | 5.0 mm |
| Bending radius | 15 x cable diameter |
| Storage temperature range | -30 °C – 90 °C |
| Temperature range connector | -25 °C – 90 °C |
| Temperature range cable fixed | -25 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Mechanical service life | - |
| Weight (kg/piece) | 0.02 0.03 0.04 0.05 0.06 0.16 0.05 0.06 0.08 0.10 0.13 0.31 |
| Approvals | cULus |

| Accessories | Article number | Type | Pkg. units |
|------------------------|----------------|-----------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 |

Action chart

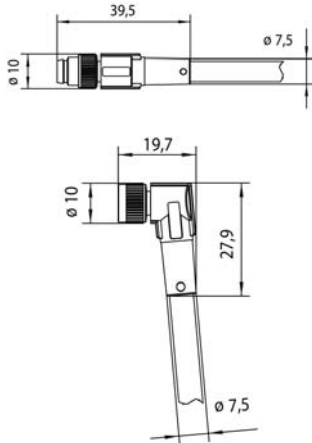


Actuator sensor interface - M8 / M8 – cables

Male M8 straight to female M8 angled with PUR cable
self-locking screwed connection
c-track compatible

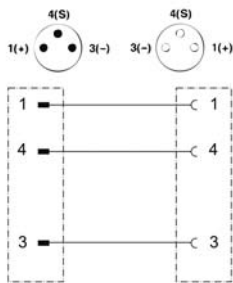


Dimensions

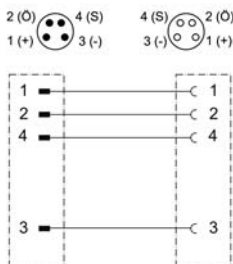


PIN assignment

488003, 488006, 488010, 488015,
488020, 488050



411003, 411006, 411010, 411015,
411020, 411050



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|--------------------------|----|
| 3-pole | | | | |
| Cable length | 0.3 | 488003 | STG3-M8/KUW3-M8 0,3M-PUR | 10 |
| | 0.6 | 488006 | STG3-M8/KUW3-M8 0,6M-PUR | 10 |
| | 1.0 | 488010 | STG3-M8/KUW3-M8 1,0M-PUR | 10 |
| | 1.5 | 488015 | STG3-M8/KUW3-M8 1,5M-PUR | 10 |
| | 2.0 | 488020 | STG3-M8/KUW3-M8 2,0M-PUR | 10 |
| | 5.0 | 488050 | STG3-M8/KUW3-M8 5,0M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 0.3 | 411003 | STG4-M8/KUW4-M8 0,3M-PUR | 10 |
| | 0.6 | 411006 | STG4-M8/KUW4-M8 0,6M-PUR | 10 |
| | 1.0 | 411010 | STG4-M8/KUW4-M8 1,0M-PUR | 10 |
| | 1.5 | 411015 | STG4-M8/KUW4-M8 1,5M-PUR | 10 |
| | 2.0 | 411020 | STG4-M8/KUW4-M8 2,0M-PUR | 10 |
| | 5.0 | 411050 | STG4-M8/KUW4-M8 5,0M-PUR | 10 |

| Technical data | 3-pole | 4-pole |
|-----------------------------|-------------------------|-------------------------|
| Rated voltage | AC/DC 24 V | |
| Nominal voltage range | max. 60 V | max. 30 V |
| Rated current | 3 A | |
| Number of terminations | 3 | 4 |
| Cable length | 0.3 0.6 1.0 1.5 2.0 5.0 | 0.3 0.6 1.0 1.5 2.0 5.0 |
| Status indication | - | |
| Current consumption per LED | - | |
| Coding | - | |
| Shielding | - | |

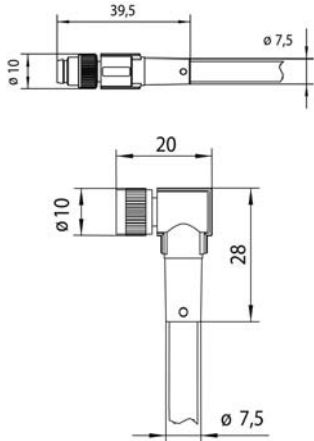
| General | M8 x 1, male straight / M8 x 1, female angled | | | | | | | | | | | |
|--|---|-------------|-------------------|------|------|------|-------------------------------------|------|------|------|------|------|
| Design | M8 x 1, male straight / M8 x 1, female angled | | | | | | | | | | | |
| Rated insulation voltage (EN 50178) | 100 V | | | | | | | | | | | |
| Test voltage | 1.5 kV | | | | | | | | | | | |
| Pollution degree | 3 | | | | | | | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | | | | | | | |
| Contact resistance | <5 mΩ | | | | | | | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | | | | | | | |
| IP rating | IP 67, in screwed condition | | | | | | | | | | | |
| Housing material | TPU black | | | | | | | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | | | | | | | |
| Thread material | CuSn nickel plated | | | | | | | | | | | |
| Gasket | NBR | | | | | | | | | | | |
| Cable construction | 3 x 0.25 mm ² (32 x 0.1) | | | | | | 4 x 0.25 mm ² (32 x 0.1) | | | | | |
| Cable jacket | PUR, RAL 9001 black | | | | | | | | | | | |
| Conductor insulation | PVC coloured | | | | | | | | | | | |
| Cable diameter | 4.4 mm | | | | | | | | | | | |
| Bending radius | 15 x cable diameter | | | | | | | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | | | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | | | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | | | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | | | | | | | |
| Mechanical service life | - | | | | | | | | | | | |
| Weight (kg/piece) | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.16 | 0.05 | 0.06 | 0.08 | 0.10 | 0.13 | 0.31 |
| Approvals | cULus | | | | | | | | | | | |
| Accessories | Article number | Type | Pkg. units | | | | | | | | | |
| Cable Markers 4x23mm | 499988 | LB M8/M12 | 5 | | | | | | | | | |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 | | | | | | | | | |

Actuator sensor interface - M8 / M8 – cables

Male M8 straight to female M8 angled with PUR cable and 360° shielding
self-locking screwed connection
c-track compatible

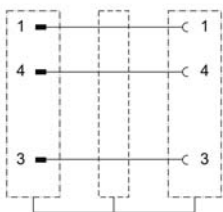
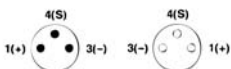


Dimensions

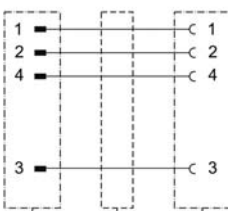


PIN assignment

457803, 457806, 457810, 457815,
457820, 457850



457903, 457906, 457910, 457915,
457920, 457950



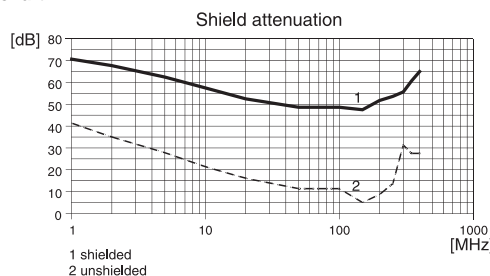
| Description | Part-No. | Type | PU | |
|---------------|----------|--------|------------------------------|----|
| 3-pole | | | | |
| Cable length | 0.3 | 457803 | STG3-M8/KUW3-M8 (C) 0,3M-PUR | 10 |
| | 0.6 | 457806 | STG3-M8/KUW3-M8 (C) 0,6M-PUR | 10 |
| | 1.0 | 457810 | STG3-M8/KUW3-M8 (C) 1,0M-PUR | 10 |
| | 1.5 | 457815 | STG3-M8/KUW3-M8 (C) 1,5M-PUR | 10 |
| | 2.0 | 457820 | STG3-M8/KUW3-M8 (C) 2,0M-PUR | 10 |
| | 5.0 | 457850 | STG3-M8/KUW3-M8 (C) 5,0M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 0.3 | 457903 | STG4-M8/KUW4-M8 (C) 0,3M-PUR | 10 |
| | 0.6 | 457906 | STG4-M8/KUW4-M8 (C) 0,6M-PUR | 10 |
| | 1.0 | 457910 | STG4-M8/KUW4-M8 (C) 1,0M-PUR | 10 |
| | 1.5 | 457915 | STG4-M8/KUW4-M8 (C) 1,5M-PUR | 10 |
| | 2.0 | 457920 | STG4-M8/KUW4-M8 (C) 2,0M-PUR | 10 |
| | 5.0 | 457950 | STG4-M8/KUW4-M8 (C) 5,0M-PUR | 10 |

| Technical data | 3-pole | | | | | 4-pole | | | | | | |
|-----------------------------|------------|-----|-----|-----|-----|-----------|-----|-----|-----|-----|-----|-----|
| Rated voltage | AC/DC 24 V | | | | | | | | | | | |
| Nominal voltage range | max. 60 V | | | | | max. 30 V | | | | | | |
| Rated current | 3 A | | | | | | | | | | | |
| Number of terminations | 3 | | | | | 4 | | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 |
| Status indication | - | | | | | | | | | | | |
| Current consumption per LED | - | | | | | | | | | | | |
| Coding | - | | | | | | | | | | | |
| Shielding | 360° | | | | | | | | | | | |

| General | |
|--|---|
| Design | M8 x 1, male straight / M8 x 1, female angled |
| Rated insulation voltage (EN 50178) | 100 V |
| Test voltage | 1.5 kV |
| Pollution degree | 3 |
| Insulation resistance | >10 ⁹ Ω |
| Contact resistance | <5 mΩ |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 67, in screwed condition |
| Housing material | TPU black |
| Contact material | CuSn, gold plated nickel |
| Thread material | CuSn nickel plated |
| Gasket | NBR |
| Cable construction | 3 x 0.25 mm ² (32 x 0.1) 4 x 0.25 mm ² (32 x 0.1) |
| Cable jacket | PUR, RAL 9001 black |
| Conductor insulation | PVC coloured |
| Cable diameter | 5.0 mm |
| Bending radius | 15 x cable diameter |
| Storage temperature range | -30 °C – 90 °C |
| Temperature range connector | -25 °C – 90 °C |
| Temperature range cable fixed | -25 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Mechanical service life | - |
| Weight (kg/piece) | 0.02 0.03 0.04 0.05 0.06 0.16 0.05 0.06 0.08 0.10 0.13 0.31 |
| Approvals | cULus |

| Accessories | Article number | Type | Pkg. units |
|------------------------|----------------|-----------|------------|
| Cable Markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 |

Action chart

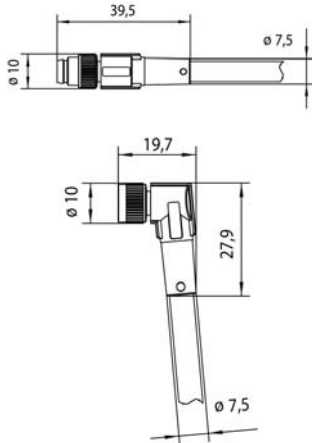


Actuator sensor interface - M8 / M8 – cables

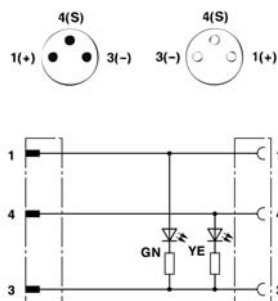
Male M8 straight to female 8 pin angled with LEDs and PUR cable
self-locking screwed connection
c-track compatible



Dimensions



PIN assignment



| Description | Part-No. | Type | PU |
|---------------|----------|--------|-----------------------------------|
| 3-pole | | | |
| Cable length | 0.3 | 489003 | STG3-M8/KUW3-M8 LED A 0,3M-PUR 10 |
| | 0.6 | 489006 | STG3-M8/KUW3-M8 LED A 0,6M-PUR 10 |
| | 1.0 | 489010 | STG3-M8/KUW3-M8 LED A 1,0M-PUR 10 |
| | 1.5 | 489015 | STG3-M8/KUW3-M8 LED A 1,5M-PUR 10 |
| | 2.0 | 489020 | STG3-M8/KUW3-M8 LED A 2,0M-PUR 10 |
| | 5.0 | 489050 | STG3-M8/KUW3-M8 LED A 5,0M-PUR 10 |

| Technical data | | 3-pole | | | | | |
|-----------------------------|-----|---------------|-----|-----|-----|-----|--|
| Rated voltage | | DC 24 V | | | | | |
| Nominal voltage range | | DC 10 – 30 V | | | | | |
| Rated current | | 3 A | | | | | |
| Number of terminations | | 3 | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 | |
| Status indication | | – | | | | | |
| Current consumption per LED | | < 10 mA / LED | | | | | |
| Coding | | – | | | | | |
| Shielding | | – | | | | | |

| General | |
|--|---|
| Design | M8 x 1, male straight / M8 x 1, female angled with LEDs |
| Rated insulation voltage (EN 50178) | 100 V |
| Test voltage | 1.5 kV |
| Pollution degree | 3 |
| Insulation resistance | >10 ⁹ Ω |
| Contact resistance | <5 mΩ |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 67, in screwed condition |
| Housing material | TPU black |
| Contact material | CuSn, gold plated nickel |
| Thread material | CuSn nickel plated |
| Gasket | NBR |
| Cable construction | 3 x 0.25 mm ² (32 x 0.1) |
| Cable jacket | PUR, RAL 9001 black |
| Conductor insulation | PVC coloured |
| Cable diameter | 4.4 mm |
| Bending radius | 15 x cable diameter |
| Storage temperature range | -30 °C – 90 °C |
| Temperature range connector | -25 °C – 90 °C |
| Temperature range cable fixed | -25 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Mechanical service life | – |
| Weight (kg/piece) | 0.02 0.03 0.04 0.05 0.06 0.16 |

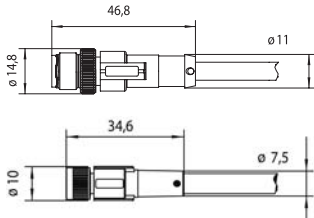
| Approvals | | | |
|------------------------|----------------|-----------|------------|
| cULus | | | |
| Accessories | Article number | Type | Pkg. units |
| Cable Markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 |

Actuator sensor interface - M12 / M8 – cables

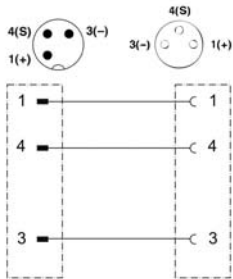
Male M12 straight to female M8 straight with PUR cable
self-locking screwed connection
c-track compatible



Dimensions



PIN assignment



| Description | Part-No. | | Type | PU |
|---------------|----------|--------|---------------------------|----|
| 3-pole | | | | |
| Cable length | 0.3 | 422003 | STG3-M12/KUG3-M8 0,3M-PUR | 10 |
| | 0.6 | 422006 | STG3-M12/KUG3-M8 0,6M-PUR | 10 |
| | 1.0 | 422010 | STG3-M12/KUG3-M8 1,0M-PUR | 10 |
| | 1.5 | 422015 | STG3-M12/KUG3-M8 1,5M-PUR | 10 |
| | 2.0 | 422020 | STG3-M12/KUG3-M8 2,0M-PUR | 10 |
| | 5.0 | 422050 | STG3-M12/KUG3-M8 5,0M-PUR | 10 |

| Technical data | | 3-pole | | | | |
|-----------------------------|-----|------------|-----|-----|-----|-----|
| Rated voltage | | AC/DC 24 V | | | | |
| Nominal voltage range | | max. 60 V | | | | |
| Rated current | | 3 A | | | | |
| Number of terminations | | 3 | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 |
| Status indication | | - | | | | |
| Current consumption per LED | | - | | | | |
| Coding | | A (M12) | | | | |
| Shielding | | - | | | | |

| General | | | | | | |
|--|------|--|------|------|------|------|
| Design | | M12 x 1, male straight / M8 x 1, female straight | | | | |
| Rated insulation voltage (EN 50178) | | 100 V | | | | |
| Test voltage | | 1.5 kV | | | | |
| Pollution degree | | 3 | | | | |
| Insulation resistance | | >10 ⁹ Ω | | | | |
| Contact resistance | | <5 mΩ | | | | |
| Class of flammability according to UL 94 | | V0 | | | | |
| IP rating | | IP 67, in screwed condition | | | | |
| Housing material | | TPU black | | | | |
| Contact material | | CuSn, gold plated nickel | | | | |
| Thread material | | CuSn nickel plated | | | | |
| Gasket | | NBR | | | | |
| Cable construction | | 3 x 0.25 mm ² (32 x 0.1) | | | | |
| Cable jacket | | PUR, RAL 9001 black | | | | |
| Conductor insulation | | PVC coloured | | | | |
| Cable diameter | | 4.4 mm | | | | |
| Bending radius | | cable diameter | | | | |
| Storage temperature range | | -30 °C – 90 °C | | | | |
| Temperature range connector | | -25 °C – 90 °C | | | | |
| Temperature range cable fixed | | -25 °C – 80 °C | | | | |
| Temperature range cable moving | | -5 °C – 80 °C | | | | |
| Mechanical service life | | - | | | | |
| Weight (kg/piece) | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.16 |

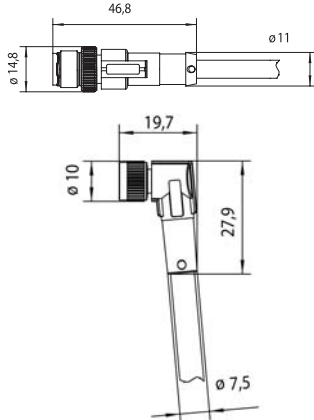
| Approvals | | cULus | | | | |
|-------------------------|----------------|-------|------------|--|------------|--|
| Accessories | Article number | | Type | | Pkg. units | |
| Cable markers 4x23mm | 499988 | | LB M8/M12 | | 5 | |
| Torque setting tool M8 | 490090 | | DM-SET M8 | | 1 | |
| Torque setting tool M12 | 490091 | | DM-SET M12 | | 1 | |

Actuator sensor interface - M12 / M8 – cables

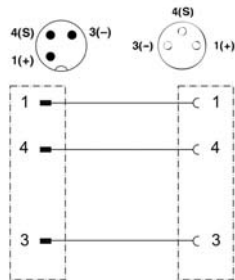
Male M12 straight to female 8 pin angled with PUR cable
self-locking screwed connection
c-track compatible



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|---------------------------|----|
| 3-pole | | | | |
| Cable length | 0.3 | 427003 | STG3-M12/KUW3-M8 0,3M-PUR | 10 |
| | 0.6 | 427006 | STG3-M12/KUW3-M8 0,6M-PUR | 10 |
| | 1.0 | 427010 | STG3-M12/KUW3-M8 1,0M-PUR | 10 |
| | 1.5 | 427015 | STG3-M12/KUW3-M8 1,5M-PUR | 10 |
| | 2.0 | 427020 | STG3-M12/KUW3-M8 2,0M-PUR | 10 |
| | 5.0 | 427050 | STG3-M12/KUW3-M8 5,0M-PUR | 10 |

| Technical data | | 3-pole | | | | | | |
|-----------------------------|-----|------------|-----|-----|-----|-----|--|--|
| Rated voltage | | AC/DC 24 V | | | | | | |
| Nominal voltage range | | max. 60 V | | | | | | |
| Rated current | | 3 A | | | | | | |
| Number of terminations | | 3 | | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 | | |
| Status indication | | - | | | | | | |
| Current consumption per LED | | - | | | | | | |
| Coding | | A (M12) | | | | | | |
| Shielding | | - | | | | | | |

| General | | | | | | | | |
|--|------|--|------|------|------|------|--|--|
| Design | | M12 x 1, male straight / M8 x 1, female angled | | | | | | |
| Rated insulation voltage (EN 50178) | | 100 V | | | | | | |
| Test voltage | | 1.5 kV | | | | | | |
| Pollution degree | | 3 | | | | | | |
| Insulation resistance | | >10 ⁹ Ω | | | | | | |
| Contact resistance | | <5 mΩ | | | | | | |
| Class of flammability according to UL 94 | | V0 | | | | | | |
| IP rating | | IP 67, in screwed condition | | | | | | |
| Housing material | | TPU black | | | | | | |
| Contact material | | CuSn, gold plated nickel | | | | | | |
| Thread material | | CuSn nickel plated | | | | | | |
| Gasket | | NBR | | | | | | |
| Cable construction | | 3 x 0.25 mm ² (32 x 0.1) | | | | | | |
| Cable jacket | | PUR, RAL 9001 black | | | | | | |
| Conductor insulation | | PVC coloured | | | | | | |
| Cable diameter | | 4.4 mm | | | | | | |
| Bending radius | | 15 x cable diameter | | | | | | |
| Storage temperature range | | -30 °C – 90 °C | | | | | | |
| Temperature range connector | | -25 °C – 90 °C | | | | | | |
| Temperature range cable fixed | | -25 °C – 80 °C | | | | | | |
| Temperature range cable moving | | -5 °C – 80 °C | | | | | | |
| Mechanical service life | | - | | | | | | |
| Weight (kg/piece) | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.16 | | |

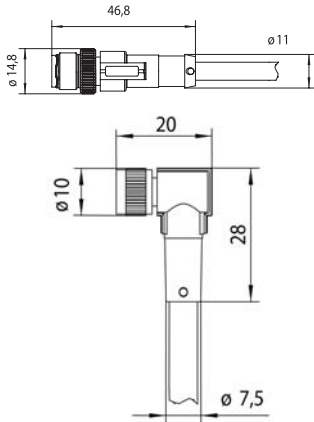
| Approvals | | cULus | | | | | | |
|-------------------------|----------------|------------|------------|--|--|--|--|--|
| Accessories | Article number | Type | Pkg. units | | | | | |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 | | | | | |
| Torque setting tool M8 | 490090 | DM-SET M8 | 1 | | | | | |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 | | | | | |

Actuator sensor interface - M12 / M8 – cables

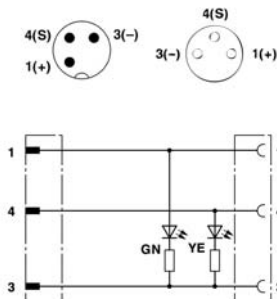
Male M12 straight to female 8 pin angled with LEDs and PUR cable
self-locking screwed connection
c-track compatible



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|---------------------------------|----|
| 3-pole | | | | |
| Cable length | 0.3 | 426003 | STG3-M12/KUW3-M8 LED A 0,3M-PUR | 10 |
| | 0.6 | 426006 | STG3-M12/KUW3-M8 LED A 0,6M-PUR | 10 |
| | 1.0 | 426010 | STG3-M12/KUW3-M8 LED A 1,0M-PUR | 10 |
| | 1.5 | 426015 | STG3-M12/KUW3-M8 LED A 1,5M-PUR | 10 |
| | 2.0 | 426020 | STG3-M12/KUW3-M8 LED A 2,0M-PUR | 10 |
| | 5.0 | 426050 | STG3-M12/KUW3-M8 LED A 5,0M-PUR | 10 |

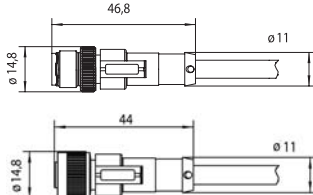
| Technical data | | 3-pole | | | | | |
|--|--|-----------------------|-------------|------|-------------------|------|--|
| Rated voltage | DC 24 V | | | | | | |
| Nominal voltage range | DC 10 – 30V | | | | | | |
| Rated current | 3 A | | | | | | |
| Number of terminations | 3 | | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 | |
| Status indication | Operating voltage: LED green, I/O: LED yellow | | | | | | |
| Current consumption per LED | <10 mA / LED | | | | | | |
| Coding | A (M12) | | | | | | |
| Shielding | - | | | | | | |
| General | | | | | | | |
| Design | M12 x 1, male straight / M8 x 1, female angled with LEDs | | | | | | |
| Rated insulation voltage (EN 50178) | 32 V | | | | | | |
| Test voltage | - | | | | | | |
| Pollution degree | 3 | | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | | |
| Contact resistance | <5 mΩ | | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | | |
| IP rating | IP 67, in screwed condition | | | | | | |
| Housing material | TPU black | | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | | |
| Thread material | CuSn nickel plated | | | | | | |
| Gasket | NBR | | | | | | |
| Cable construction | 3 x 0.25 mm ² (32 x 0.1) | | | | | | |
| Cable jacket | PUR, RAL 9001 black | | | | | | |
| Conductor insulation | PVC coloured | | | | | | |
| Cable diameter | 4.4 mm | | | | | | |
| Bending radius | 15 x cable diameter | | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | | |
| Mechanical service life | - | | | | | | |
| Weight (kg/piece) | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.16 | |
| Approvals | cULus | | | | | | |
| Accessories | | Article number | Type | | Pkg. units | | |
| Cable markers 4x23mm | 499988 | LB M8/M12 | | 5 | | | |
| Torque setting tool M8 | 490090 | DM-SET M8 | | 1 | | | |
| Torque setting tool M12 | 490091 | DM-SET M12 | | 1 | | | |

Actuator sensor interface - M12 / M12 – cables

Male M12 straight to female M12, straight with PUR cable
self-locking screwed connection
c-track compatible

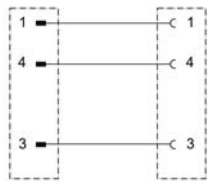
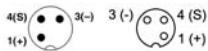


Dimensions

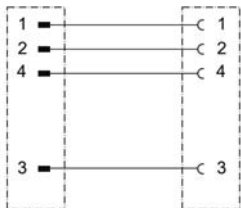
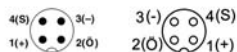


PIN assignment

428003, 428006, 428010, 428015,
428020, 428050



429003, 429006, 429010, 429015,
429020, 429050



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|----------------------------|----|
| 3-pole | | | | |
| Cable length | 0.3 | 428003 | STG3-M12/KUG3-M12 0,3M-PUR | 10 |
| | 0.6 | 428006 | STG3-M12/KUG3-M12 0,6M-PUR | 10 |
| | 1.0 | 428010 | STG3-M12/KUG3-M12 1,0M-PUR | 10 |
| | 1.5 | 428015 | STG3-M12/KUG3-M12 1,5M-PUR | 10 |
| | 2.0 | 428020 | STG3-M12/KUG3-M12 2,0M-PUR | 10 |
| | 5.0 | 428050 | STG3-M12/KUG3-M12 5,0M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 0.3 | 429003 | STG4-M12/KUG4-M12 0,3M-PUR | 10 |
| | 0.6 | 429006 | STG4-M12/KUG4-M12 0,6M-PUR | 10 |
| | 1.0 | 429010 | STG4-M12/KUG4-M12 1,0M-PUR | 10 |
| | 1.5 | 429015 | STG4-M12/KUG4-M12 1,5M-PUR | 10 |
| | 2.0 | 429020 | STG4-M12/KUG4-M12 2,0M-PUR | 10 |
| | 5.0 | 429050 | STG4-M12/KUG4-M12 5,0M-PUR | 10 |

| Technical data | 3-pole | | | | | 4-pole | | | | | | |
|-----------------------------|---------------|------------|-----|-----|-----|--------|-----|-----|-----|-----|-----|-----|
| | Rated voltage | AC/DC 24 V | | | | | | | | | | |
| Nominal voltage range | max. 250 V | | | | | | | | | | | |
| Rated current | 4 A | | | | | | | | | | | |
| Number of terminations | 3 | | | | | 4 | | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 |
| Status indication | - | | | | | | | | | | | |
| Current consumption per LED | - | | | | | | | | | | | |
| Coding | A | | | | | | | | | | | |
| Shielding | - | | | | | | | | | | | |

| General | |
|--|---|
| Design | M12 x 1, male straight / M12 x 1, female straight |
| Rated insulation voltage (EN 50178) | 320 V |
| Test voltage | 2.5 kV |
| Pollution degree | 3 |
| Insulation resistance | >10 ⁹ Ω |
| Contact resistance | <5 mΩ |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 67, in screwed condition |
| Housing material | TPU black |
| Contact material | CuSn, gold plated nickel |
| Thread material | CuSn nickel plated |
| Gasket | NBR |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) 4 x 0.34 mm ² (42 x 0.1) |
| Cable jacket | PUR, RAL 9001 black |
| Conductor insulation | PVC coloured |
| Cable diameter | 4.4 mm 4.7 mm |
| Bending radius | 15 x cable diameter |
| Storage temperature range | -30 °C – 90 °C |
| Temperature range connector | -25 °C – 90 °C |
| Temperature range cable fixed | -25 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Mechanical service life | - |
| Weight (kg/piece) | 0.04 0.06 0.08 0.10 0.13 0.24 0.05 0.07 0.09 0.11 0.14 0.26 |
| Approvals | cULus |

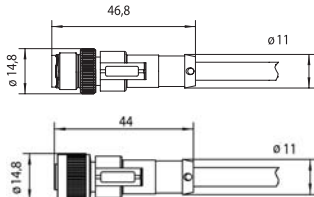
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - M12 / M12 – cables

Male M12 straight to female M12 straight with PUR cable
self-locking screwed connection
c-track compatible

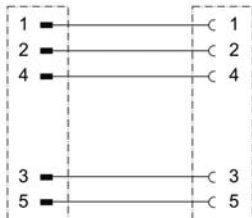
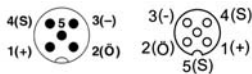


Dimensions

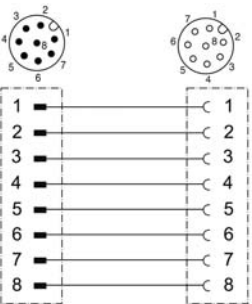


PIN assignment

442003, 442006, 442010, 442015,
442020, 442050



420003, 420006, 420010, 420015,
420020, 420050



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|----------------------------|----|
| 5-pole | | | | |
| Cable length | 0.3 | 442003 | STG5-M12/KUG5-M12 0,3M-PUR | 10 |
| | 0.6 | 442006 | STG5-M12/KUG5-M12 0,6M-PUR | 10 |
| | 1.0 | 442010 | STG5-M12/KUG5-M12 1,0M-PUR | 10 |
| | 1.5 | 442015 | STG5-M12/KUG5-M12 1,5M-PUR | 10 |
| | 2.0 | 442020 | STG5-M12/KUG5-M12 2,0M-PUR | 10 |
| | 5.0 | 442050 | STG5-M12/KUG5-M12 5,0M-PUR | 10 |
| 8-pole | | | | |
| Cable length | 0.3 | 420003 | STG8-M12/KUG8-M12 0,3M-PUR | 10 |
| | 0.6 | 420006 | STG8-M12/KUG8-M12 0,6M-PUR | 10 |
| | 1.0 | 420010 | STG8-M12/KUG8-M12 1,0M-PUR | 10 |
| | 1.5 | 420015 | STG8-M12/KUG8-M12 1,5M-PUR | 10 |
| | 2.0 | 420020 | STG8-M12/KUG8-M12 2,0M-PUR | 10 |
| | 5.0 | 420050 | STG8-M12/KUG8-M12 5,0M-PUR | 10 |

| Technical data | 5-pole | | | | | 8-pole | | | | | | |
|-----------------------------|------------|-----|-----|-----|-----|--------|-----|-----|-----|-----|-----|-----|
| Rated voltage | AC/DC 24 V | | | | | | | | | | | |
| Nominal voltage range | max. 30 V | | | | | | | | | | | |
| Rated current | 4 A | | | | | 2 A | | | | | | |
| Number of terminations | 5 | | | | | 8 | | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 |
| Status indication | - | | | | | | | | | | | |
| Current consumption per LED | - | | | | | | | | | | | |
| Coding | A | | | | | | | | | | | |
| Shielding | - | | | | | | | | | | | |

| General | |
|--|---|
| Design | M12 x 1, male straight / M12 x 1, female straight |
| Rated insulation voltage (EN 50178) | 63 V |
| Test voltage | 1.5 kV |
| Pollution degree | 3 |
| Insulation resistance | >10 ⁹ Ω |
| Contact resistance | <5 mΩ |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 67, in screwed condition |
| Housing material | TPU black |
| Contact material | CuSn, gold plated nickel |
| Thread material | CuSn nickel plated |
| Gasket | NBR |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) 8 x 0.25 mm ² (32 x 0.1) |
| Cable jacket | PUR, RAL 9001 black |
| Conductor insulation | PVC coloured |
| Cable diameter | 5.0 mm 5.9 mm |
| Bending radius | 15 x cable diameter |
| Storage temperature range | -30 °C – 90 °C |
| Temperature range connector | -25 °C – 90 °C |
| Temperature range cable fixed | -25 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Mechanical service life | - |
| Weight (kg/piece) | 0.05 0.06 0.09 0.11 0.14 0.30 0.05 0.06 0.09 0.11 0.14 0.30 |
| Approvals | cULus |

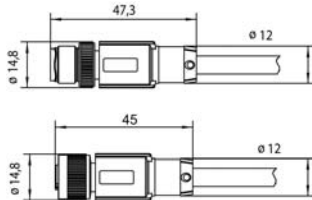
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - M12 / M12 – cables

Male M12 straight to female M12 straight with PUR cable and 360° shielding
self-locking screwed connection
c-track compatible

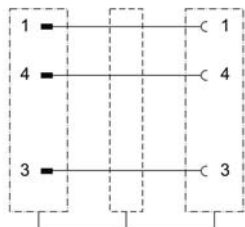
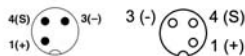


Dimensions

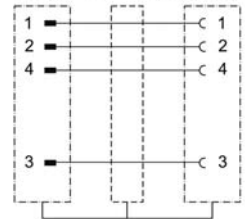
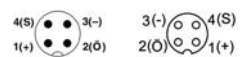


PIN assignment

457003, 457006, 457010, 457015,
457020, 457050



457103, 457106, 457110, 457115,
457120, 457150



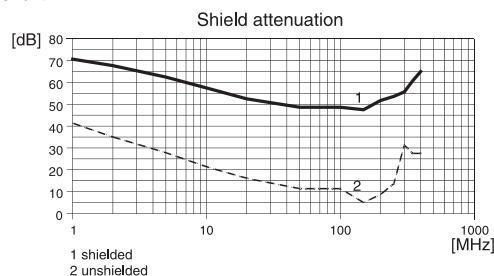
| Description | Part-No. | Type | PU |
|---------------|----------|--------|-----------------------------------|
| 3-pole | | | |
| Cable length | 0.3 | 457003 | STG3-M12/KUG3-M12 (C) 0,3M-PUR 10 |
| | 0.6 | 457006 | STG3-M12/KUG3-M12 (C) 0,6M-PUR 10 |
| | 1.0 | 457010 | STG3-M12/KUG3-M12 (C) 1,0M-PUR 10 |
| | 1.5 | 457015 | STG3-M12/KUG3-M12 (C) 1,5M-PUR 10 |
| | 2.0 | 457020 | STG3-M12/KUG3-M12 (C) 2,0M-PUR 10 |
| | 5.0 | 457050 | STG3-M12/KUG3-M12 (C) 5,0M-PUR 10 |
| 4-pole | | | |
| Cable length | 0.3 | 457103 | STG4-M12/KUG4-M12 (C) 0,3M-PUR 10 |
| | 0.6 | 457106 | STG4-M12/KUG4-M12 (C) 0,6M-PUR 10 |
| | 1.0 | 457110 | STG4-M12/KUG4-M12 (C) 1,0M-PUR 10 |
| | 1.5 | 457115 | STG4-M12/KUG4-M12 (C) 1,5M-PUR 10 |
| | 2.0 | 457120 | STG4-M12/KUG4-M12 (C) 2,0M-PUR 10 |
| | 5.0 | 457150 | STG4-M12/KUG4-M12 (C) 5,0M-PUR 10 |

| Technical data | 3-pole | 4-pole |
|-----------------------------|-------------------------|-------------------------|
| Rated voltage | AC/DC 24 V | |
| Nominal voltage range | max. 250 V | |
| Rated current | 4 A | |
| Number of terminations | 3 | 4 |
| Cable length | 0.3 0.6 1.0 1.5 2.0 5.0 | 0.3 0.6 1.0 1.5 2.0 5.0 |
| Status indication | - | |
| Current consumption per LED | - | |
| Coding | A | |
| Shielding | 360° | |

| General | M12 x 1, male straight / M12 x 1, female straight |
|--|---|
| Design | M12 x 1, male straight / M12 x 1, female straight |
| Rated insulation voltage (EN 50178) | 320 V |
| Test voltage | 2.5 kV |
| Pollution degree | 3 |
| Insulation resistance | >10 ⁹ Ω |
| Contact resistance | <5 mΩ |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 67, in screwed condition |
| Housing material | TPU black |
| Contact material | CuSn, gold plated nickel |
| Thread material | CuSn nickel plated |
| Gasket | NBR |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) 4 x 0.34 mm ² (42 x 0.1) |
| Cable jacket | PUR, RAL 9001 black |
| Conductor insulation | PVC coloured |
| Cable diameter | 5.9 mm |
| Bending radius | 15 x cable diameter |
| Storage temperature range | -30 °C – 90 °C |
| Temperature range connector | -25 °C – 90 °C |
| Temperature range cable fixed | -25 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Mechanical service life | - |
| Weight (kg/piece) | 0.05 0.08 0.10 0.12 0.15 0.25 0.06 0.09 0.11 0.13 0.16 0.31 |
| Approvals | cULus |

| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Action chart

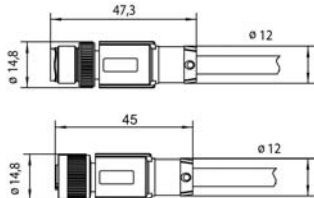


Actuator sensor interface - M12 / M12 – cables

Male M12 straight to female M12 straight with PUR cable and 360° shielding
self-locking screwed connection
c-track compatible

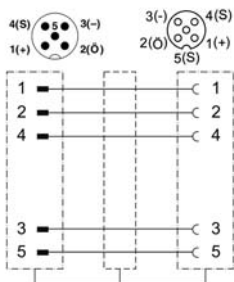


Dimensions

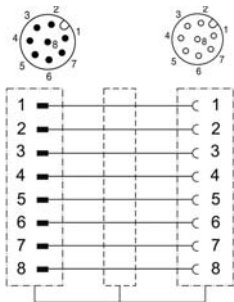


PIN assignment

457203, 457206, 457210, 457215,
457220, 457250



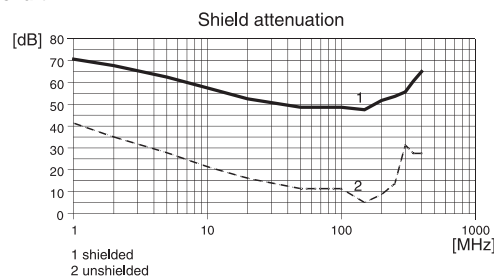
459103, 459106, 459110, 459115,
459120, 459150



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|------------------------------|----|
| 5-pole | | | | |
| Cable length | 0.3 | 457203 | STG5-M12/KUG5-M12(C)0,3M PUR | 10 |
| | 0.6 | 457206 | STG5-M12/KUG5-M12(C)0,6M PUR | 10 |
| | 1.0 | 457210 | STG5-M12/KUG5-M12(C)1,0M PUR | 10 |
| | 1.5 | 457215 | STG5-M12/KUG5-M12(C)1,5M PUR | 10 |
| | 2.0 | 457220 | STG5-M12/KUG5-M12(C)2,0M PUR | 10 |
| | 5.0 | 457250 | STG5-M12/KUG5-M12(C)5,0M PUR | 10 |
| 8-pole | | | | |
| Cable length | 0.3 | 459103 | STG8-M12/KUG8-M12(C)0,3M PUR | 10 |
| | 0.6 | 459106 | STG8-M12/KUG8-M12(C)0,6M PUR | 10 |
| | 1.0 | 459110 | STG8-M12/KUG8-M12(C)1,0M PUR | 10 |
| | 1.5 | 459115 | STG8-M12/KUG8-M12(C)1,5M PUR | 10 |
| | 2.0 | 459120 | STG8-M12/KUG8-M12(C)2,0M PUR | 10 |
| | 5.0 | 459150 | STG8-M12/KUG8-M12(C)5,0M PUR | 10 |

| Technical data | 5-pole | 8-pole | |
|--|---|-------------------------------------|------------|
| Rated voltage | AC/DC 24 V | | |
| Nominal voltage range | max. 30 V | | |
| Rated current | 4 A | 2 A | |
| Number of terminations | 5 | 8 | |
| Cable length | 0.3 0.6 1.0 1.5 2.0 5.0 | 0.3 0.6 1.0 1.5 2.0 5.0 | |
| Status indication | - | | |
| Current consumption per LED | - | | |
| Coding | A | | |
| Shielding | 360° | | |
| General | | | |
| Design | M12 x 1, male straight / M12 x 1, female straight | | |
| Rated insulation voltage (EN 50178) | 63 V | 36 V | |
| Test voltage | 1.5 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | >10 ⁹ Ω | | |
| Contact resistance | <5 mΩ | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 67, in screwed condition | | |
| Housing material | TPU black | | |
| Contact material | CuSn, gold plated nickel | | |
| Thread material | CuSn nickel plated | | |
| Gasket | NBR | | |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) | 8 x 0.25 mm ² (32 x 0.1) | |
| Cable jacket | PUR, RAL 9001 black | | |
| Conductor insulation | PVC coloured | | |
| Cable diameter | 5.9 mm | | |
| Bending radius | 15 x cable diameter | | |
| Storage temperature range | -30 °C – 90 °C | | |
| Temperature range connector | -25 °C – 90 °C | | |
| Temperature range cable fixed | -25 °C – 80 °C | | |
| Temperature range cable moving | -5 °C – 80 °C | | |
| Mechanical service life | - | | |
| Weight (kg/piece) | 0.06 0.08 0.11 0.13 0.16 0.32 0.05 0.07 0.09 0.11 0.14 0.30 | | |
| Approvals | cULus | | |
| Accessories | | | |
| | Article number | Type | Pkg. units |
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Action chart

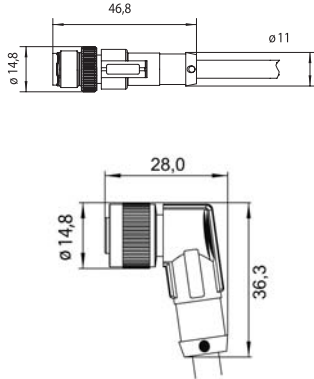


Actuator sensor interface - M12 / M12 – cables

Male M12 straight to female M12 angled with PUR cable
self-locking screwed connection
c-track compatible

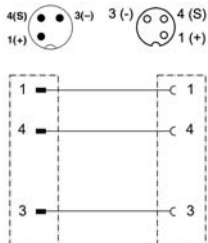


Dimensions

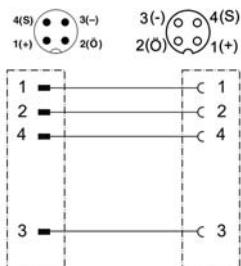


PIN assignment

467003, 467006, 467010, 467015,
467020, 467050



418003, 418006, 418010, 418015,
418020, 418050



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|----------------------------|----|
| 3-pole | | | | |
| Cable length | 0.3 | 467003 | STG3-M12/KUW3-M12 0,3M-PUR | 10 |
| | 0.6 | 467006 | STG3-M12/KUW3-M12 0,6M-PUR | 10 |
| | 1.0 | 467010 | STG3-M12/KUW3-M12 1,0M-PUR | 10 |
| | 1.5 | 467015 | STG3-M12/KUW3-M12 1,5M-PUR | 10 |
| | 2.0 | 467020 | STG3-M12/KUW3-M12 2,0M-PUR | 10 |
| | 5.0 | 467050 | STG3-M12/KUW3-M12 5,0M-PUR | 10 |
| 4-pole | | | | |
| Cable length | 0.3 | 418003 | STG4-M12/KUW4-M12 0,3M-PUR | 10 |
| | 0.6 | 418006 | STG4-M12/KUW4-M12 0,6M-PUR | 10 |
| | 1.0 | 418010 | STG4-M12/KUW4-M12 1,0M-PUR | 10 |
| | 1.5 | 418015 | STG4-M12/KUW4-M12 1,5M-PUR | 10 |
| | 2.0 | 418020 | STG4-M12/KUW4-M12 2,0M-PUR | 10 |
| | 5.0 | 418050 | STG4-M12/KUW4-M12 5,0M-PUR | 10 |

| Technical data | 3-pole | 4-pole |
|-----------------------------|-------------------------|-------------------------|
| Rated voltage | AC/DC 24 V | |
| Nominal voltage range | max. 250 V | |
| Rated current | 4 A | |
| Number of terminations | 3 | 4 |
| Cable length | 0.3 0.6 1.0 1.5 2.0 5.0 | 0.3 0.6 1.0 1.5 2.0 5.0 |
| Status indication | - | |
| Current consumption per LED | - | |
| Coding | A | |
| Shielding | - | |

| General | M12 x 1, male straight / M12 x 1, female angled |
|--|---|
| Design | M12 x 1, male straight / M12 x 1, female angled |
| Rated insulation voltage (EN 50178) | 320 V |
| Test voltage | 2.5 kV |
| Pollution degree | 3 |
| Insulation resistance | >10 ⁹ Ω |
| Contact resistance | <5 mΩ |
| Class of flammability according to UL 94 | V0 |
| IP rating | IP 67, in screwed condition |
| Housing material | TPU black |
| Contact material | CuSn, gold plated nickel |
| Thread material | CuSn nickel plated |
| Gasket | NBR |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) 4 x 0.34 mm ² (42 x 0.1) |
| Cable jacket | PUR, RAL 9001 black |
| Conductor insulation | PVC coloured |
| Cable diameter | 4.4 mm 4.7 mm |
| Bending radius | 15 x cable diameter |
| Storage temperature range | -30 °C – 90 °C |
| Temperature range connector | -25 °C – 90 °C |
| Temperature range cable fixed | -25 °C – 80 °C |
| Temperature range cable moving | -5 °C – 80 °C |
| Mechanical service life | - |
| Weight (kg/piece) | 0.03 0.04 0.06 0.08 0.10 0.22 0.05 0.06 0.08 0.10 0.13 0.24 |
| Approvals | cULus |

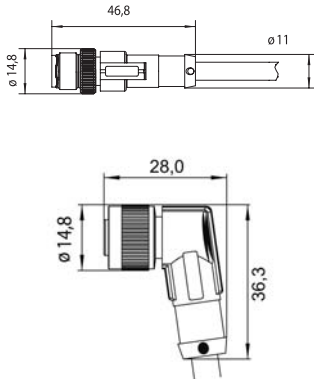
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - M12 / M12 – cables

Male M12 straight to female M12 angled with PUR cable
self-locking screwed connection
c-track compatible

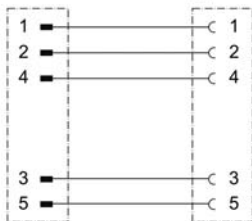
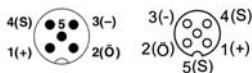


Dimensions

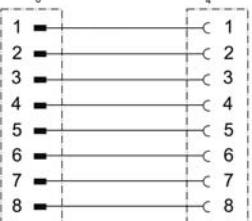


PIN assignment

440003, 440006, 440015, 440010,
440020, 440050



424003, 424006, 424010, 424015,
424020, 424050



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|----------------------------|----|
| 5-pole | | | | |
| Cable length | 0.3 | 440003 | STG5-M12/KUW5-M12 0,3M-PUR | 10 |
| | 0.6 | 440006 | STG5-M12/KUW5-M12 0,6M-PUR | 10 |
| | 1.5 | 440015 | STG5-M12/KUW5-M12 1,5M-PUR | 10 |
| | 1.0 | 440010 | STG5-M12/KUW5-M12 1,0M-PUR | 10 |
| | 2.0 | 440020 | STG5-M12/KUW5-M12 2,0M-PUR | 10 |
| | 5.0 | 440050 | STG5-M12/KUW5-M12 5,0M-PUR | 10 |
| 8-pole | | | | |
| Cable length | 0.3 | 424003 | STG8-M12/KUW8-M12 0,3M-PUR | 10 |
| | 0.6 | 424006 | STG8-M12/KUW8-M12 0,6M-PUR | 10 |
| | 1.0 | 424010 | STG8-M12/KUW8-M12 1,0M-PUR | 10 |
| | 1.5 | 424015 | STG8-M12/KUW8-M12 1,5M-PUR | 10 |
| | 2.0 | 424020 | STG8-M12/KUW8-M12 2,0M-PUR | 10 |
| | 5.0 | 424050 | STG8-M12/KUW8-M12 5,0M-PUR | 10 |

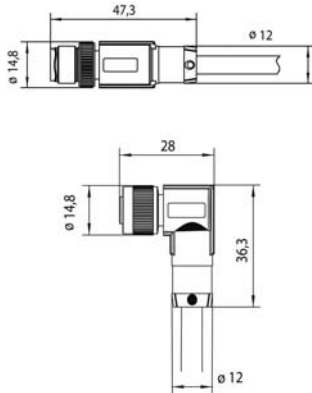
| Technical data | 5-pole | | | | | 8-pole | | | | | | |
|--|---|------|------|------|------|-------------------------------------|------|------|------|------|------------|------|
| Rated voltage | AC/DC 24 V | | | | | | | | | | | |
| Nominal voltage range | max. 30 V | | | | | | | | | | | |
| Rated current | max. 4 A per contact | | | | | max. 2 A per contact | | | | | | |
| Number of terminations | 5 | | | | | 8 | | | | | | |
| Cable length | 0.3 | 0.6 | 1.5 | 1.0 | 2.0 | 5.0 | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 |
| Status indication | - | | | | | | | | | | | |
| Current consumption per LED | - | | | | | | | | | | | |
| Coding | A | | | | | | | | | | | |
| Shielding | - | | | | | | | | | | | |
| General | | | | | | | | | | | | |
| Design | M12 x 1, male straight / M12 x 1, female straight | | | | | | | | | | | |
| Rated insulation voltage (EN 50178) | 63 V | | | | | 36 V | | | | | | |
| Test voltage | 1.5 kV | | | | | | | | | | | |
| Pollution degree | 3 | | | | | | | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | | | | | | | |
| Contact resistance | <5 mΩ | | | | | | | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | | | | | | | |
| IP rating | IP 67, in screwed condition | | | | | | | | | | | |
| Housing material | TPU black | | | | | | | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | | | | | | | |
| Thread material | CuSn nickel plated | | | | | | | | | | | |
| Gasket | NBR | | | | | | | | | | | |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) | | | | | 8 x 0.25 mm ² (32 x 0.1) | | | | | | |
| Cable jacket | PUR, RAL 9001 black | | | | | | | | | | | |
| Conductor insulation | PVC coloured | | | | | | | | | | | |
| Cable diameter | 5.0 mm | | | | | 5.9 mm | | | | | | |
| Bending radius | 15 x cable diameter | | | | | | | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | | | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | | | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | | | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | | | | | | | |
| Mechanical service life | - | | | | | | | | | | | |
| Weight (kg/piece) | 0.05 | 0.06 | 0.13 | 0.08 | 0.11 | 0.22 | 0.05 | 0.06 | 0.08 | 0.11 | 0.13 | 0.22 |
| Approvals | cULus | | | | | | | | | | | |
| Accessories | | | | | | | | | | | | |
| | Article number | | | | | Type | | | | | Pkg. units | |
| Cable markers 4x23mm | 499988 | | | | | LB M8/M12 | | | | | 5 | |
| Torque setting tool M12 | 490091 | | | | | DM-SET M12 | | | | | 1 | |

Actuator sensor interface - M12 / M12 – cables

Male M12 straight to female M12 angled with PUR cable and 360° shielding
self-locking screwed connection
c-track compatible

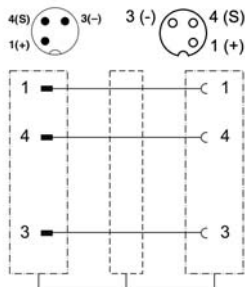


Dimensions

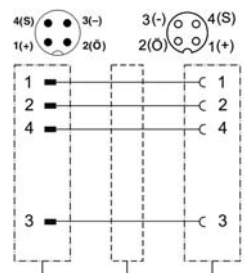


PIN assignment

457303, 457306, 457310, 457315,
457320, 457350



457403, 457406, 457410, 457415,
457420, 457450



| Description | Part-No. | Type | PU |
|---------------|----------|--------|-----------------------------------|
| 3-pole | | | |
| Cable length | 0.3 | 457303 | STG3-M12/KUW3-M12 (C) 0,3M-PUR 10 |
| | 0.6 | 457306 | STG3-M12/KUW3-M12 (C) 0,6M-PUR 10 |
| | 1.0 | 457310 | STG3-M12/KUW3-M12 (C) 1,0M-PUR 10 |
| | 1.5 | 457315 | STG3-M12/KUW3-M12 (C) 1,5M-PUR 10 |
| | 2.0 | 457320 | STG3-M12/KUW3-M12 (C) 2,0M-PUR 10 |
| | 5.0 | 457350 | STG3-M12/KUW3-M12 (C) 5,0M-PUR 10 |
| 4-pole | | | |
| Cable length | 0.3 | 457403 | STG4-M12/KUW4-M12 (C) 0,3M-PUR 10 |
| | 0.6 | 457406 | STG4-M12/KUW4-M12 (C) 0,6M-PUR 10 |
| | 1.0 | 457410 | STG4-M12/KUW4-M12 (C) 1,0M-PUR 10 |
| | 1.5 | 457415 | STG4-M12/KUW4-M12 (C) 1,5M-PUR 10 |
| | 2.0 | 457420 | STG4-M12/KUW4-M12 (C) 2,0M-PUR 10 |
| | 5.0 | 457450 | STG4-M12/KUW4-M12 (C) 5,0M-PUR 10 |

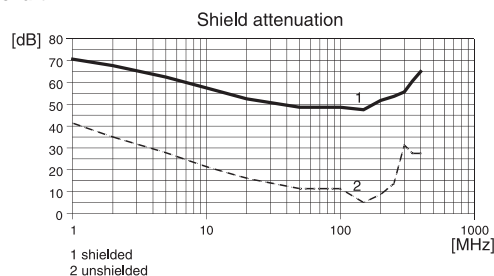
| Technical data | 3-pole | 4-pole |
|-----------------------------|-------------------------|-------------------------|
| Rated voltage | | AC/DC 24 V |
| Nominal voltage range | | max. 250 V |
| Rated current | | 4 A |
| Number of terminations | 3 | 4 |
| Cable length | 0.3 0.6 1.0 1.5 2.0 5.0 | 0.3 0.6 1.0 1.5 2.0 5.0 |
| Status indication | | – |
| Current consumption per LED | | – |
| Coding | | A |
| Shielding | | 360° |

General

| | | |
|--|---|-------------------------------------|
| Design | M12 x 1, male straight / M12 x 1, female angled | |
| Rated insulation voltage (EN 50178) | 320 V | |
| Test voltage | 2.5 kV | |
| Pollution degree | 3 | |
| Insulation resistance | >10 ⁹ Ω | |
| Contact resistance | <5 mΩ | |
| Class of flammability according to UL 94 | V0 | |
| IP rating | IP 67, in screwed condition | |
| Housing material | TPU black | |
| Contact material | CuSn, gold plated nickel | |
| Thread material | CuSn nickel plated | |
| Gasket | NBR | |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) | 4 x 0.34 mm ² (42 x 0.1) |
| Cable jacket | PUR, RAL 9001 black | |
| Conductor insulation | PVC coloured | |
| Cable diameter | 5.9 mm | |
| Bending radius | 15 x cable diameter | |
| Storage temperature range | -30 °C – 90 °C | |
| Temperature range connector | -25 °C – 90 °C | |
| Temperature range cable fixed | -25 °C – 80 °C | |
| Temperature range cable moving | -5 °C – 80 °C | |
| Mechanical service life | – | |
| Weight (kg/piece) | 0.06 0.08 0.10 0.12 0.15 0.25 | 0.06 0.09 0.11 0.12 0.16 0.31 |
| Approvals | cULus | |

| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Action chart

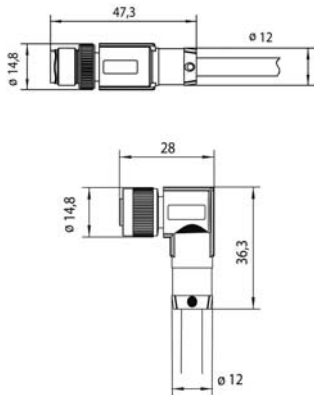


Actuator sensor interface - M12 / M12 – cables

Male M12 straight to female M12 angled with PUR cable and 360° shielding
self-locking screwed connection
c-track compatible

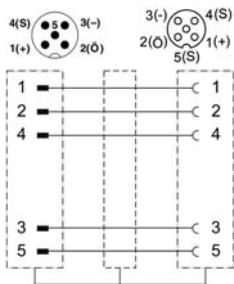


Dimensions

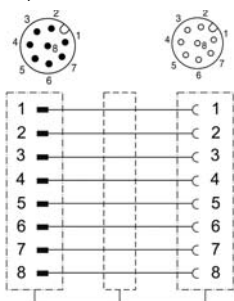


PIN assignment

457503, 457506, 457510, 457515,
457520, 457550



459203, 459206, 459210, 459215,
459220, 459250



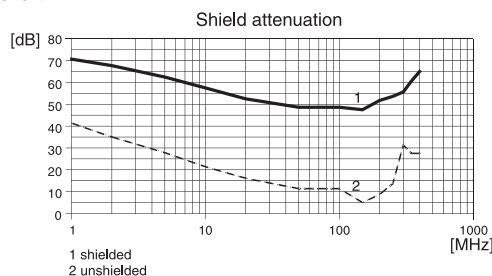
| Description | Part-No. | Type | PU |
|---------------|----------|--------|-----------------------------------|
| 5-pole | | | |
| Cable length | 0.3 | 457503 | STG5-M12/KUW5-M12 (C) 0,3M-PUR 10 |
| | 0.6 | 457506 | STG5-M12/KUW5-M12 (C) 0,6M-PUR 10 |
| | 1.0 | 457510 | STG5-M12/KUW5-M12 (C) 1,0M-PUR 10 |
| | 1.5 | 457515 | STG5-M12/KUW5-M12 (C) 1,5M-PUR 10 |
| | 2.0 | 457520 | STG5-M12/KUW5-M12 (C) 2,0M-PUR 10 |
| | 5.0 | 457550 | STG5-M12/KUW5-M12 (C) 5,0M-PUR 10 |
| 8-pole | | | |
| Cable length | 0.3 | 459203 | STG8-M12/KUW8-M12 (C) 0,3M-PUR 10 |
| | 0.6 | 459206 | STG8-M12/KUW8-M12 (C) 0,6M-PUR 10 |
| | 1.0 | 459210 | STG8-M12/KUW8-M12 (C) 1,0M-PUR 10 |
| | 1.5 | 459215 | STG8-M12/KUW8-M12 (C) 1,5M-PUR 10 |
| | 2.0 | 459220 | STG8-M12/KUW8-M12 (C) 2,0M-PUR 10 |
| | 5.0 | 459250 | STG8-M12/KUW8-M12 (C) 5,0M-PUR 10 |

| Technical data | 5-pole | 8-pole |
|-----------------------------|-------------------------|-------------------------|
| Rated voltage | AC/DC 24 V | |
| Nominal voltage range | max. 30 V | |
| Rated current | 4 A | 2 A |
| Number of terminations | 5 | 8 |
| Cable length | 0.3 0.6 1.0 1.5 2.0 5.0 | 0.3 0.6 1.0 1.5 2.0 5.0 |
| Status indication | - | |
| Current consumption per LED | - | |
| Coding | A | |
| Shielding | 360° | |

| General | M12 x 1, male straight / M12 x 1, female straight | |
|--|---|-------------------------------------|
| Design | M12 x 1, male straight / M12 x 1, female straight | |
| Rated insulation voltage (EN 50178) | 63 V | 36 V |
| Test voltage | 1.5 kV | |
| Pollution degree | 3 | |
| Insulation resistance | >10 ⁹ Ω | |
| Contact resistance | <5 mΩ | |
| Class of flammability according to UL 94 | V0 | |
| IP rating | IP 67, in screwed condition | |
| Housing material | TPU black | |
| Contact material | CuSn, gold plated nickel | |
| Thread material | CuSn nickel plated | |
| Gasket | NBR | |
| Cable construction | 5 x 0.34 mm ² (42 x 0.1) | 8 x 0.25 mm ² (32 x 0.1) |
| Cable jacket | PUR, RAL 9001 black | |
| Conductor insulation | PVC coloured | |
| Cable diameter | 5.9 mm | |
| Bending radius | 15 x cable diameter | |
| Storage temperature range | -30 °C – 90 °C | |
| Temperature range connector | -25 °C – 90 °C | |
| Temperature range cable fixed | -25 °C – 80 °C | |
| Temperature range cable moving | -5 °C – 80 °C | |
| Mechanical service life | - | |
| Weight (kg/piece) | 0.06 0.08 0.11 0.13 0.17 0.33 | 0.05 0.06 0.08 0.11 0.13 0.22 |
| Approvals | cULus | |

| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Action chart

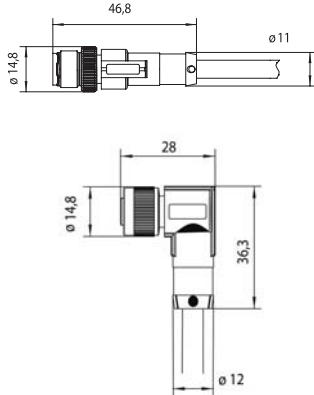


Actuator sensor interface - M12 / M12 – cables

Male M12 straight to female M12 angled with LEDs and PUR cable
self-locking screwed connection
c-track compatible

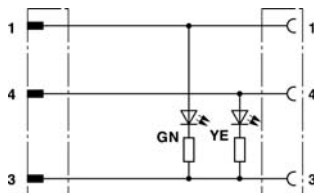


Dimensions

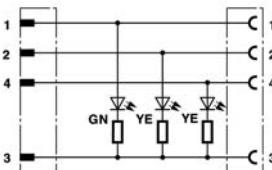
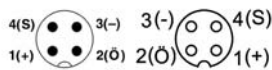


PIN assignment

430003, 430006, 430010, 430015,
430020, 430050, 431003



431006, 431010, 431015, 431020,
431050



| Description | Part-No. | Type | PU |
|---------------|----------|--------|-------------------------------------|
| 3-pole | | | |
| Cable length | 0.3 | 430003 | STG3-M12/KUW3-M12 LED A 0,3M-PUR 10 |
| | 0.6 | 430006 | STG3-M12/KUW3-M12 LED A 0,6M-PUR 10 |
| | 1.0 | 430010 | STG3-M12/KUW3-M12 LED A 1,0M-PUR 10 |
| | 1.5 | 430015 | STG3-M12/KUW3-M12 LED A 1,5M-PUR 10 |
| | 2.0 | 430020 | STG3-M12/KUW3-M12 LED A 2,0M-PUR 10 |
| | 5.0 | 430050 | STG3-M12/KUW3-M12 LED A 5,0M-PUR 10 |
| 4-pole | | | |
| Cable length | 0.3 | 431003 | STG4-M12/KUW4-M12 LED P 0,3M-PUR 10 |
| | 0.6 | 431006 | STG4-M12/KUW4-M12 LED P 0,6M-PUR 10 |
| | 1.0 | 431010 | STG4-M12/KUW4-M12 LED P 1,0M-PUR 10 |
| | 1.5 | 431015 | STG4-M12/KUW4-M12 LED P 1,5M-PUR 10 |
| | 2.0 | 431020 | STG4-M12/KUW4-M12 LED P 2,0M-PUR 10 |
| | 5.0 | 431050 | STG4-M12/KUW4-M12 LED P 5,0M-PUR 10 |

| Technical data | 3-pole | | | | | 4-pole | | | | | | |
|-----------------------------|---|---------|-----|-----|-----|--------|-----|-----|-----|-----|-----|-----|
| | Rated voltage | DC 24 V | | | | | | | | | | |
| Nominal voltage range | DC 10 – 30 V | | | | | | | | | | | |
| Rated current | 4 A | | | | | | | | | | | |
| Number of terminations | 3 | | | | | 4 | | | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 5.0 |
| Status indication | Operating voltage: LED green, I/O: LED yellow | | | | | | | | | | | |
| Current consumption per LED | <10 mA | | | | | | | | | | | |
| Coding | A | | | | | | | | | | | |
| Shielding | - | | | | | | | | | | | |

| General | | | | | | | | | | | | |
|--|---|------|------|------|------|-------------------------------------|------|------|------|------|------|------|
| Design | M12 x 1, male straight / M12 x 1, female angled with LEDs | | | | | | | | | | | |
| Rated insulation voltage (EN 50178) | 32 V | | | | | | | | | | | |
| Test voltage | - | | | | | | | | | | | |
| Pollution degree | 3 | | | | | | | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | | | | | | | |
| Contact resistance | <5 mΩ | | | | | | | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | | | | | | | |
| IP rating | IP 67, in screwed condition | | | | | | | | | | | |
| Housing material | TPU black | | | | | | | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | | | | | | | |
| Thread material | CuSn nickel plated | | | | | | | | | | | |
| Gasket | NBR | | | | | | | | | | | |
| Cable construction | 3 x 0.34 mm ² (42 x 0.1) | | | | | 4 x 0.34 mm ² (42 x 0.1) | | | | | | |
| Cable jacket | PUR, RAL 9001 black | | | | | | | | | | | |
| Conductor insulation | PVC coloured | | | | | | | | | | | |
| Cable diameter | 4.4 mm | | | | | 4.7 mm | | | | | | |
| Bending radius | 15 x cable diameter | | | | | | | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | | | | | | | |
| Temperature range connector | -25 °C – 90 °C | | | | | | | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | | | | | | | |
| Temperature range cable moving | -5 °C – 80 °C | | | | | | | | | | | |
| Mechanical service life | - | | | | | | | | | | | |
| Weight (kg/piece) | 0.03 | 0.04 | 0.06 | 0.08 | 0.10 | 0.22 | 0.05 | 0.06 | 0.08 | 0.10 | 0.13 | 0.24 |
| Approvals | cULus | | | | | | | | | | | |

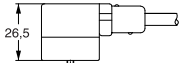
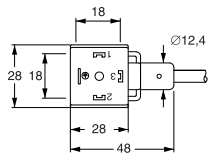
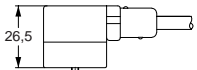
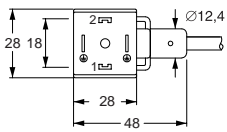
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - M12 / valve suppressor

Male M12 straight to valve suppressor form A self-locking screwed connection c-track compatible

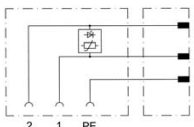


Dimensions

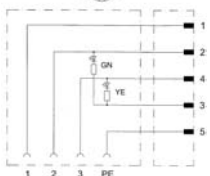


PIN assignment

435003, 435006, 435010, 435015, 435020



445003, 445006, 445010, 445015, 445020



| Description | Part-No. | Type | PU | |
|-------------------------------------|----------|--------|-------------------------|----|
| Design A + varistor | | | | |
| Cable length | 0.3 | 435003 | STG3 M12/LV-A 0,3m PUR | 10 |
| | 0.6 | 435006 | STG3 M12/A | 10 |
| | 1.0 | 435010 | STG3 M12/LV-A 1,0m PUR | 10 |
| | 1.5 | 435015 | STG3 M12/LV-A 1,5m PUR | 10 |
| | 2.0 | 435020 | STG3 M12/LV-A 2,0m PUR | 10 |
| Design A for Pressure switch | | | | |
| Cable length | 0.3 | 445003 | STG5 M12/LDS-A 0,3m PUR | 10 |
| | 0.6 | 445006 | STG5 M12/LDS-A 0,6m PUR | 10 |
| | 1.0 | 445010 | STG5 M12/LDS-A 1,0m PUR | 10 |
| | 1.5 | 445015 | STG5 M12/LDS-A 1,5m PUR | 10 |
| | 2.0 | 445020 | STG5 M12/LDS-A 2,0m PUR | 10 |

| Technical data | Design A + varistor | | | | | Design A for Pressure switch | | | | |
|-----------------------------|---------------------|-----|-----|-----|-----|------------------------------|-----|-----|-----|-----|
| Rated voltage | AC/DC 24 V | | | | | DC 24 V | | | | |
| Nominal voltage range | max. 30 V | | | | | DC 10 V – 30 V | | | | |
| Rated current | | | | | | 4 A | | | | |
| Rated frequency | 50–60 Hz | | | | | – | | | | |
| Protection device | Varistor + LED | | | | | – | | | | |
| Number of terminations | 3 | | | | | 5 | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 |
| Status indication | LED yellow | | | | | LED yellow/green | | | | |
| Current consumption per LED | | | | | | 4mA / LED | | | | |
| Shut-off points | ≥ 52V | | | | | – | | | | |
| Holding Capacity | ≤ 100VA | | | | | – | | | | |

General

| | | | | | | | | | | | |
|--|--|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|--|
| Design | M12x1, male straight / Form A, contact clearance 18 mm, 0° | | | | | | | | | | |
| Rated insulation voltage (EN 50178) | 32 V | | | | | | | | | | |
| Test voltage | – | | | | | | | | | | |
| Pollution degree | 3 | | | | | | | | | | |
| Insulation resistance | >10 ⁹ Ω | | | | | | | | | | |
| Contact resistance | > 5mΩ | | | | | | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | | | | | | |
| IP rating | IP 67, in screwed condition | | | | | | | | | | |
| Housing material | TPU black / transparent | | | | | | | | | | |
| Contact material | CuSn, gold plated nickel | | | | | | | | | | |
| Thread material | CuSn nickel plated | | | | | | | | | | |
| Gasket | – | | | | | | | | | | |
| Cable construction | 3 x 0.5 mm ² | | | | | 5 x 0.5 mm ² | | | | | |
| Cable jacket | PUR, RAL 9001 black | | | | | | | | | | |
| Conductor insulation | – | | | | | | | | | | |
| Cable diameter | 5.5 mm | | | | | 6.0 mm | | | | | |
| Bending radius | 15 x cable diameter | | | | | | | | | | |
| Storage temperature range | -30 °C – 90 °C | | | | | | | | | | |
| Temperature range connector | -25°C – 90°C | | | | | | | | | | |
| Temperature range cable fixed | -25 °C – 80 °C | | | | | | | | | | |
| Temperature range cable moving | -5 °C – 70 °C | | | | | | | | | | |
| Mechanical service life | – | | | | | | | | | | |
| Weight (kg/piece) | 0.054 | 0.066 | 0.084 | 0.108 | 0.126 | 0.064 | 0.078 | 0.096 | 0.119 | 0.142 | |
| Standards | EN 175301-803 | | | | | | | | | | |
| Approvals | – | | | | | | | | | | |

| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

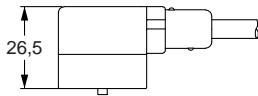
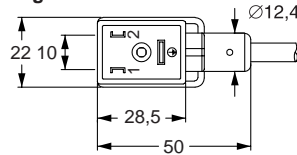
Actuator sensor interface - M12 / valve suppressor

Male M12 straight to valve suppressor form B / form BI self-locking screwed connection c-track compatible

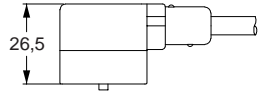
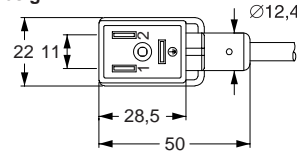


Dimensions

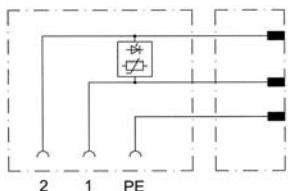
Design B



Design BI



PIN assignment



| Description | Part-No. | Type | PU | |
|-----------------------------|----------|--------|----------------------------|----|
| Design B + varistor | | | | |
| Cable length | 0.3 | 436003 | STG3 M12/LV-B 0° 0,3m PUR | 10 |
| | 0.6 | 436006 | STG3 M12/LV-B 0° 0,6m PUR | 10 |
| | 1.0 | 436010 | STG3 M12/LV-B 0° 1,0m PUR | 10 |
| | 1.5 | 436015 | STG3 M12/LV-B 0° 1,5m PUR | 10 |
| | 2.0 | 436020 | STG3 M12/LV-B 0° 2,0m PUR | 10 |
| Design BI + varistor | | | | |
| Cable length | 0.3 | 439003 | STG3 M12/LV-BI 0° 0,3m PUR | 10 |
| | 0.6 | 439006 | STG3 M12/LV-BI 0° 0,6m PUR | 10 |
| | 1.0 | 439010 | STG3 M12/LV-BI 0° 1,0m PUR | 10 |
| | 1.5 | 439015 | STG3 M12/LV-BI 0° 1,5m PUR | 10 |
| | 2.0 | 439020 | STG3 M12/LV-BI 0° 2,0m PUR | 10 |

| Technical data | Design B + varistor | | | | | Design BI + varistor | | | | |
|-----------------------------|---------------------|-----|-----|-----|-----|----------------------|-----|-----|-----|-----|
| Rated voltage | | | | | | AC/DC 24 V | | | | |
| Nominal voltage range | | | | | | max. 30 V | | | | |
| Rated current | | | | | | 4 A | | | | |
| Rated frequency | | | | | | 50–60 Hz | | | | |
| Protection device | | | | | | Varistor + LED | | | | |
| Number of terminations | | | | | | 3 | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 |
| Status indication | | | | | | LED yellow | | | | |
| Current consumption per LED | | | | | | 4mA / LED | | | | |
| Shut-off points | | | | | | ≥ 52V | | | | |
| Holding Capacity | | | | | | ≤ 100VA | | | | |

| General | M12x1, male straight / Form B | | | | | M12x1, male straight / Form BI | | | | |
|--|-------------------------------|-------|-------|-------|-------|--------------------------------|-------|-------|-------|-------|
| Design | M12x1, male straight / Form B | | | | | M12x1, male straight / Form BI | | | | |
| Rated insulation voltage (EN 50178) | | | | | | 32 V | | | | |
| Test voltage | | | | | | - | | | | |
| Pollution degree | | | | | | 3 | | | | |
| Insulation resistance | | | | | | >10 ⁹ Ω | | | | |
| Contact resistance | | | | | | > 5mΩ | | | | |
| Class of flammability according to UL 94 | | | | | | V0 | | | | |
| IP rating | | | | | | IP 67, in screwed condition | | | | |
| Housing material | | | | | | TPU black / transparent | | | | |
| Contact material | | | | | | CuSn, gold plated nickel | | | | |
| Thread material | | | | | | CuSn nickel plated | | | | |
| Gasket | | | | | | - | | | | |
| Cable construction | | | | | | 3 x 0.5 mm ² | | | | |
| Cable jacket | | | | | | PUR, RAL 9001 black | | | | |
| Conductor insulation | | | | | | - | | | | |
| Cable diameter | | | | | | 5.5 mm | | | | |
| Bending radius | | | | | | 15 x cable diameter | | | | |
| Storage temperature range | | | | | | -30 °C – 90 °C | | | | |
| Temperature range connector | | | | | | -25 °C – 90 °C | | | | |
| Temperature range cable fixed | | | | | | -25 °C – 80 °C | | | | |
| Temperature range cable moving | | | | | | -5 °C – 70 °C | | | | |
| Mechanical service life | | | | | | - | | | | |
| Weight (kg/piece) | 0.064 | 0.078 | 0.096 | 0.119 | 0.142 | 0.064 | 0.078 | 0.096 | 0.119 | 0.142 |
| Standards | | | | | | EN 175301-803 | | | | |
| Approvals | | | | | | - | | | | |

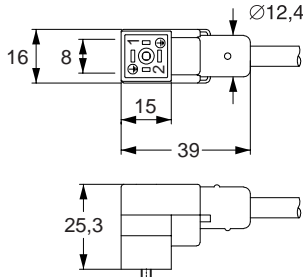
| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 5 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |

Actuator sensor interface - M12 / valve suppressor

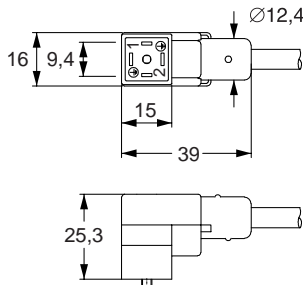
Male M12 straight to valve suppressor form C / form CI self-locking screwed connection c-track compatible



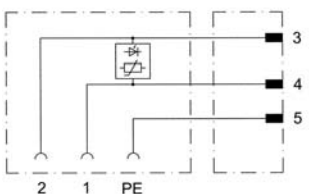
Dimensions
Design C



Design CI



PIN assignment



| Description | Part-No. | Type | PU | |
|-----------------------------|----------|--------|-------------------------|----|
| Design C + varistor | | | | |
| Cable length | 0.3 | 438003 | STG3 M12/LV-C 0,3m PUR | 10 |
| | 0.6 | 438006 | STG3 M12/LV-C 0,6m PUR | 10 |
| | 1.0 | 438010 | STG3 M12/LV-C 1,0m PUR | 10 |
| | 1.5 | 438015 | STG3 M12/LV-C 1,5m PUR | 10 |
| | 2.0 | 438020 | STG3 M12/LV-C 2,0m PUR | 10 |
| Design CI + varistor | | | | |
| Cable length | 0.3 | 441003 | STG3 M12/LV-CI 0,3m PUR | 10 |
| | 0.6 | 441006 | STG3 M12/LV-CI 0,6m PUR | 10 |
| | 1.0 | 441010 | STG3 M12/LV-CI 1,0m PUR | 10 |
| | 1.5 | 441015 | STG3 M12/LV-CI 1,5m PUR | 10 |
| | 2.0 | 441020 | STG3 M12/LV-CI 2,0m PUR | 10 |

| Technical data | Design C + varistor | | | | | Design CI + varistor | | | | |
|-----------------------------|---------------------|-----|-----|-----|-----|----------------------|-----|-----|-----|-----|
| Rated voltage | | | | | | AC/DC 24 V | | | | |
| Nominal voltage range | | | | | | 10 – 30 V | | | | |
| Rated current | | | | | | 3 A | | | | |
| Rated frequency | | | | | | 50–60 Hz | | | | |
| Protection device | | | | | | Varistor + LED | | | | |
| Number of terminations | | | | | | 3 | | | | |
| Cable length | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 | 0.3 | 0.6 | 1.0 | 1.5 | 2.0 |
| Status indication | | | | | | LED yellow | | | | |
| Current consumption per LED | | | | | | 4mA / LED | | | | |
| Shut-off points | | | | | | ≥ 52V | | | | |
| Holding Capacity | | | | | | ≤ 100VA | | | | |

| General | M12x1, male straight / Form C | | | | | M12x1, male straight / Form CI | | | | |
|--|-------------------------------|-------|-------|-------|-------|--------------------------------|-------|-------|-------|-------|
| Design | | | | | | | | | | |
| Rated insulation voltage (EN 50178) | | | | | | 32 V | | | | |
| Test voltage | | | | | | – | | | | |
| Pollution degree | | | | | | 3 | | | | |
| Insulation resistance | | | | | | >10 ⁹ Ω | | | | |
| Contact resistance | | | | | | > 5mΩ | | | | |
| Class of flammability according to UL 94 | | | | | | V0 | | | | |
| IP rating | | | | | | IP 67, in screwed condition | | | | |
| Housing material | | | | | | TPU black / transparent | | | | |
| Contact material | | | | | | CuSn, gold plated nickel | | | | |
| Thread material | | | | | | CuSn nickel plated | | | | |
| Gasket | | | | | | – | | | | |
| Cable construction | | | | | | 3 x 0.5 mm ² | | | | |
| Cable jacket | | | | | | PUR, RAL 9001 black | | | | |
| Conductor insulation | | | | | | – | | | | |
| Cable diameter | | | | | | 5.5 mm | | | | |
| Bending radius | | | | | | 15 x cable diameter | | | | |
| Storage temperature range | | | | | | -30 °C – 90 °C | | | | |
| Temperature range connector | | | | | | -25 °C – 90 °C | | | | |
| Temperature range cable fixed | | | | | | -25 °C – 80 °C | | | | |
| Temperature range cable moving | | | | | | -5 °C – 70 °C | | | | |
| Mechanical service life | | | | | | – | | | | |
| Weight (kg/piece) | 0.064 | 0.078 | 0.096 | 0.119 | 0.142 | 0.064 | 0.078 | 0.096 | 0.119 | 0.142 |
| Standards | | | | | | EN 175301-803 | | | | |
| Approvals | | | | | | – | | | | |

| Accessories | Article number | Type | Pkg. units |
|-------------------------|----------------|------------|------------|
| Cable markers 4x23mm | 499988 | LB M8/M12 | 200 |
| Torque setting tool M12 | 490091 | DM-SET M12 | 1 |
| Cable markers 4x11mm | 681313 | BZT 0411 | 100 |

Actuator sensor interface - M8 - connector

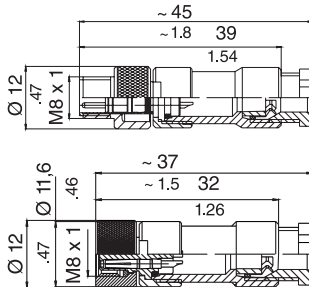
field wireable connector, M8 straight

Male / female

Solder pin

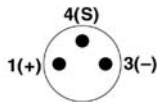


Dimensions



PIN assignment

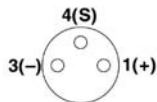
490034



490056



490036



490058



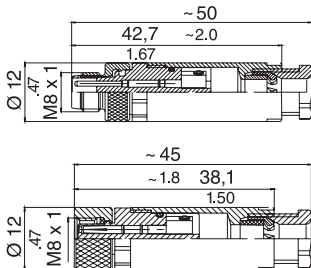
| Description | Part-No. | Type | PU | |
|--|--------------------------------------|----------------|--------------|----|
| Male | | | | |
| Number of terminations | 3 | 490034 | STGK-M8 3POL | 10 |
| | 4 | 490056 | STGK-M8 4POL | 10 |
| Female | | | | |
| Number of terminations | 3 | 490036 | STGK-M8 3POL | 10 |
| | 4 | 490058 | STGK-M8 4POL | 10 |
| Technical data | | | | |
| Male | | Female | | |
| Rated voltage | AC/DC 24 V | | | |
| Nominal voltage range | max 60 V | | | |
| Rated current | 4 A | | | |
| Number of terminations | 3 | 4 | 3 | 4 |
| Cable length | - | | | |
| Status indication | - | | | |
| Current consumption per LED | - | | | |
| Coding | - | | | |
| Shielding | - | | | |
| General | | | | |
| Termination | solder pin max. 0.25 mm ² | | | |
| Design | M8 x 1, male | M8 x 1, female | | |
| Contact material | CuZn, gold-plated | | | |
| Gasket | - | NBR | | |
| Test voltage | 1.5 kV | | | |
| Pollution degree | 3 | | | |
| Insulation resistance | >10 ¹⁰ Ω | | | |
| Contact resistance | <3 mΩ | | | |
| Class of flammability according to UL 94 | V0 | | | |
| IP rating | IP 67, in screwed condition | | | |
| Housing material | PBT black | | | |
| Thread material | CuSn nickel plated | | | |
| Cable construction | - | | | |
| Cable jacket | - | | | |
| Conductor insulation | - | | | |
| Cable diameter | 3.5 – 5 mm | | | |
| Bending radius | - | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Temperature range connector | -25°C – 85°C | | | |
| Mechanical service life | >100 insertion cycles | | | |
| Weight (kg/piece) | 0.040 | | | |
| Approvals | - | | | |

Actuator sensor interface - M8 - connector

field wireable connector, M8 straight
Male / female
Screw terminal

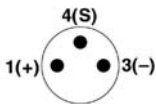


Dimensions

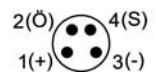


PIN assignment

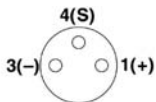
490035



490057



490037



490059



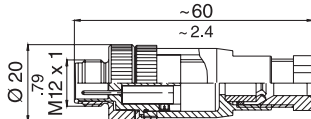
| Description | Part-No. | Type | PU | |
|--|---|----------------|-----------------|----|
| Male | | | | |
| Number of terminations | 3 | 490035 | STGK-M8 3POL SK | 10 |
| | 4 | 490057 | STGK-M8 4POL SK | 10 |
| Female | | | | |
| Number of terminations | 3 | 490037 | KUGK-M8 3POL SK | 10 |
| | 4 | 490059 | KUGK-M8 4POL SK | 10 |
| Technical data | | | | |
| Male | | Female | | |
| Rated voltage | AC/DC 24 V | | | |
| Nominal voltage range | max 60 V | | | |
| Rated current | 4 A | | | |
| Number of terminations | 3 | 4 | 3 | 4 |
| Cable length | - | | | |
| Status indication | - | | | |
| Current consumption per LED | - | | | |
| Coding | - | | | |
| Shielding | - | | | |
| General | | | | |
| Termination | Screw terminal 0.14–0.5 mm ² | | | |
| Design | M8 x 1, male | M8 x 1, female | | |
| Contact material | CuZn, gold-plated | | | |
| Gasket | - | NBR | | |
| Test voltage | 1.5 kV | | | |
| Pollution degree | 3 | | | |
| Insulation resistance | >10 ¹⁰ Ω | | | |
| Contact resistance | <3 mΩ | | | |
| Class of flammability according to UL 94 | V0 | | | |
| IP rating | IP 67, in screwed condition | | | |
| Housing material | PBT black | | | |
| Thread material | CuSn nickel plated | | | |
| Cable construction | - | | | |
| Cable jacket | - | | | |
| Conductor insulation | - | | | |
| Cable diameter | 3.5 – 5 mm | | | |
| Bending radius | - | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Temperature range connector | -25°C – 85°C | | | |
| Mechanical service life | >100 insertion cycles | | | |
| Weight (kg/piece) | 0.040 | | | |
| Approvals | - | | | |

Actuator sensor interface - M12 - connector

field wireable connector, M12 straight
Male - A coded
Screw terminal



Dimensions



PIN assignment

490016



490017



490018



490070



| Description | Part-No. | Type | PU | |
|------------------------|----------|--------|------------------|----|
| Male | | | | |
| Number of terminations | 3 | 490016 | STGK-M12 3POL SK | 10 |
| | 4 | 490017 | STGK-M12 4POL SK | 10 |
| | 5 | 490018 | STGK-M12 5POL SK | 10 |
| | 8 | 490070 | STGK-M12 8POL SK | 10 |

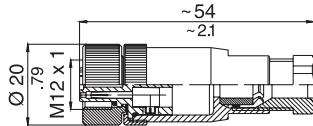
| Technical data | | Male | | |
|--|---------------------------|-----------------------------|-------|---|
| Rated voltage | | AC/DC 24 V | | |
| Nominal voltage range | 250 V | 125 V | 60 V | |
| Rated current | 4 A | | 2 A | |
| Number of terminations | 3 | 4 | 5 | 8 |
| Cable length | | - | | |
| Status indication | | - | | |
| Current consumption per LED | | - | | |
| Coding | | A | | |
| Shielding | | - | | |
| General | | | | |
| Design | | M12 x 1, male | | |
| Test voltage | 2.95 kV | 1.75 kV | 910 V | |
| Pollution degree | | 3 | | |
| Insulation resistance | | >10 ¹⁰ Ω | | |
| Contact resistance | | <3 mΩ | | |
| Class of flammability according to UL 94 | | V0 | | |
| IP rating | | IP 67, in screwed condition | | |
| Housing material | | PBT black | | |
| Contact material | | CuZn, gold-plated | | |
| Thread material | | CuSn nickel plated | | |
| Gasket | | - | | |
| Cable construction | | - | | |
| Cable jacket | | - | | |
| Conductor insulation | | - | | |
| Cable diameter | 4 - 6 mm | 6 - 8 mm | | |
| Bending radius | | - | | |
| Storage temperature range | | -40 °C - 90 °C | | |
| Temperature range connector | | -25°C - 85°C | | |
| Termination | | Screw terminal | | |
| Gauge | max. 0,75 mm ² | max. 0,5 mm ² | | |
| Mechanical service life | | >100 insertion cycles | | |
| Weight (kg/piece) | | 0.040 | | |
| Approvals | | - | | |

Actuator sensor interface - M12 - connector

field wireable connector, M12 straight
Female - A coded
Screw terminal



Dimensions



PIN assignment

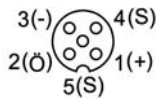
490010



490011



490012



490071



| Description | Part-No. | Type | PU | |
|------------------------|----------|--------|------------------|----|
| Female | | | | |
| Number of terminations | 3 | 490010 | KUGK-M12 3POL SK | 10 |
| | 4 | 490011 | KUGK-M12 4POL SK | 10 |
| | 5 | 490012 | KUGK-M12 5POL SK | 10 |
| | 8 | 490071 | KUGK-M12 8POL SK | 10 |

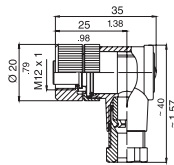
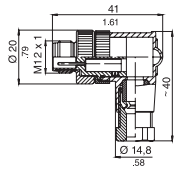
| Technical data | | Female | | |
|--|-----------------------------|------------|--------------------------|---|
| Rated voltage | | AC/DC 24 V | | |
| Nominal voltage range | 250 V | 125 V | 60 V | |
| Rated current | 4 A | | 2 A | |
| Number of terminations | 3 | 4 | 5 | 8 |
| Cable length | - | | | |
| Status indication | - | | | |
| Current consumption per LED | - | | | |
| Coding | A | | | |
| Shielding | - | | | |
| General | | | | |
| Design | M12 x 1, female | | | |
| Test voltage | 2.95 kV | 1.75 kV | 910 V | |
| Pollution degree | 3 | | | |
| Insulation resistance | >10 ¹⁰ Ω | | | |
| Contact resistance | <3 mΩ | | | |
| Class of flammability according to UL 94 | V0 | | | |
| IP rating | IP 67, in screwed condition | | | |
| Housing material | PBT black | | | |
| Contact material | CuZn, gold-plated | | | |
| Thread material | CuSn nickel plated | | | |
| Gasket | - | | | |
| Cable construction | - | | | |
| Cable jacket | - | | | |
| Conductor insulation | - | | | |
| Cable diameter | 4 – 6 mm | | 6 – 8 mm | |
| Bending radius | - | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Temperature range connector | -25 °C – 85 °C | | | |
| Termination | Screw terminal | | | |
| Gauge | max. 0,75 mm ² | | max. 0,5 mm ² | |
| Mechanical service life | >100 insertion cycles | | | |
| Weight (kg/piece) | 0.040 | | | |
| Approvals | - | | | |

Actuator sensor interface - M12 - connector

field wireable connector, M12 angled
Male / female - A coded
Screw terminal



Dimensions



PIN assignment

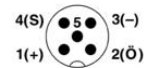
490019



490020



490021



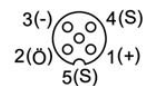
490013



490014



490015



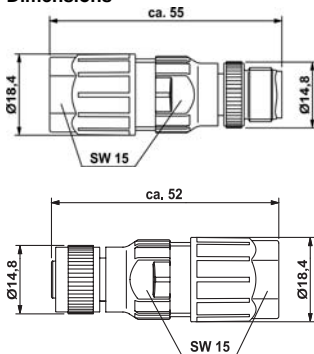
| Description | Part-No. | Type | PU | | | |
|--|-----------------------------|---------|------------------|------------------------|---------|---------|
| Male | | | | | | |
| Number of terminations | 3 | 490019 | STWK-M12 3POL SK | 10 | | |
| | 4 | 490020 | STWK-M12 4POL SK | 10 | | |
| | 5 | 490021 | STWK-M12 5POL SK | 10 | | |
| Female | | | | | | |
| Number of terminations | 3 | 490013 | KUWK-M12 3POL SK | 10 | | |
| | 4 | 490014 | KUWK-M12 4POL SK | 10 | | |
| | 5 | 490015 | KUWK-M12 5POL SK | 10 | | |
| Technical data | | | | | | |
| | Male | | Female | | | |
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | 250 V | 60 V | 250 V | 60 V | | |
| Rated current | 4 A | | | | | |
| Number of terminations | 3 | 4 | 5 | 3 | 4 | 5 |
| Cable length | - | | | | | |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | A | | | | | |
| Shielding | - | | | | | |
| General | | | | | | |
| Design | M12 x 1, male, angled | | | M12 x 1, female angled | | |
| Test voltage | 2.5 kV | 2.95 kV | 1.75 kV | 2.5 kV | 2.95 kV | 1.75 kV |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ¹⁰ Ω | | | | | |
| Contact resistance | <3 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | PBT black | | | | | |
| Contact material | CuZn, gold-plated | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | NBR | | |
| Cable construction | - | | | | | |
| Cable jacket | - | | | | | |
| Conductor insulation | - | | | | | |
| Cable diameter | 4 – 6 mm | | | | | |
| Bending radius | - | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 85 °C | | | | | |
| Termination | Screw terminal | | | | | |
| Gauge | max. 0,75 mm ² | | | | | |
| Mechanical service life | >100 insertion cycles | | | | | |
| Weight (kg/piece) | 0.040 | | | | | |
| Approvals | - | | | | | |

Actuator sensor interface - M12 - connector

field wireable connector, M12 straight
 Male / female - A coded
 IDC method of termination



Dimensions



PIN assignment

490028



490029



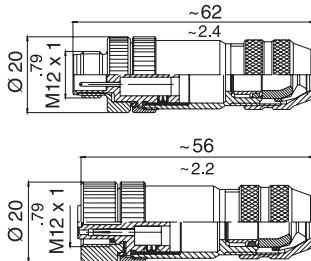
| Description | Part-No. | Type | PU | |
|--|---------------|---------------------------|-------------------|----|
| Male | | | | |
| Number of terminations | 4 | 490028 | STGK-M12 4POL SNK | 10 |
| Female | | | | |
| Number of terminations | 4 | 490029 | KUGK-M12 4POL SNK | 10 |
| Technical data | | | | |
| | Male | | Female | |
| Rated voltage | | AC/DC | | |
| Nominal voltage range | | 250 V | | |
| Rated current | | 4 | | |
| Number of terminations | | 4 | | |
| Cable length | | - | | |
| Status indication | | - | | |
| Current consumption per LED | | - | | |
| Coding | | A | | |
| Shielding | | - | | |
| General | | | | |
| Design | M12 x 1, male | | M12 x 1, female | |
| Test voltage | | 2.5 kV | | |
| Pollution degree | | 3 | | |
| Insulation resistance | | >10 ⁹ Ω | | |
| Contact resistance | | <5 | | |
| Class of flammability according to UL 94 | | V0 | | |
| IP rating | | IP 67, in screw | | |
| Housing material | | PBT black | | |
| Contact material | | CuZn, gc | | |
| Thread material | | CuSn nickel plated | | |
| Gasket | - | | NBR | |
| Cable construction | | - | | |
| Cable jacket | | - | | |
| Conductor insulation | | - | | |
| Cable diameter | | 4 - 7 | | |
| Bending radius | | - | | |
| Storage temperature range | | -40 °C - | | |
| Temperature range connector | | -25°C - 80°C | | |
| Termination | | IDC method (| | |
| Gauge | | 0,34-0,75 mm ² | | |
| Mechanical service life | | >100 inser | | |
| Weight (kg/piece) | | 0.030 | | |
| Approvals | | - | | |

Actuator sensor interface - M12 - connector

field wireable connector, M12 straight shielded
Male / female - A coded (Device-Net)
Screw terminal



Dimensions



PIN assignment

490050



490051



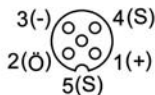
490054



490052



490053



490077



| Description | Part-No. | Type | PU | | | |
|--|-----------------------------|--------|--------------------------|---------------------------|--------|--------------------------|
| Male | | | | | | |
| Number of terminations | 4 | 490050 | STGK4-M12 (C)-A | 10 | | |
| | 5 | 490051 | STGK5-M12 (C)-A | 10 | | |
| | 8 | 490054 | STGK8-M12 (C)-A | 10 | | |
| Female | | | | | | |
| Number of terminations | 4 | 490052 | KUGK4-M12 (C)-A | 10 | | |
| | 5 | 490053 | KUGK5-M12 (C)-A | 10 | | |
| | 8 | 490077 | KUGK8-M12 (C)-A | 10 | | |
| Technical data | | | | | | |
| | Male | | Female | | | |
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | 250 V | 60 V | 30 V | 250 V | 60 V | 30 V |
| Rated current | 4 A | | 2 A | 4 A | | 2 A |
| Number of terminations | 4 | 5 | 8 | 4 | 5 | 8 |
| Cable length | - | | | | | |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | A | | | | | |
| Shielding | 360° | | | | | |
| General | | | | | | |
| Design | M12 x 1, male | | | M12 x 1, female | | |
| Test voltage | 2.5 kV | 1.5 kV | 800 V | 2.5 kV | 1.5 kV | 800 V |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ¹⁰ Ω | | | | | |
| Contact resistance | <3 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | zinc diecast, nickel plated | | | | | |
| Contact material | CuZn, gold-plated | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | NBR | | |
| Cable construction | - | | | | | |
| Cable jacket | - | | | | | |
| Conductor insulation | - | | | | | |
| Cable diameter | 6 – 8 mm | | | | | |
| Bending radius | - | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 85 °C | | | | | |
| Termination | Screw terminal | | | | | |
| Gauge | max. 0,75 mm ² | | max. 0,5 mm ² | max. 0,75 mm ² | | max. 0,5 mm ² |
| Mechanical service life | >100 insertion cycles | | | | | |
| Weight (kg/piece) | 0.050 | | | | | |
| Approvals | - | | | | | |

Comments

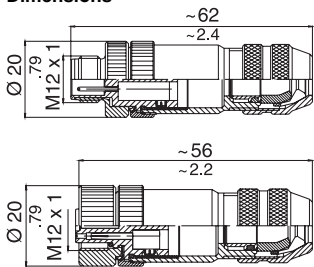
5-pole variant for device - network suitable

Actuator sensor interface - M12 - connector

field wireable connector, M12 straight shielded
 Male / female - B coded (Profibus, Interbus)
 Screw terminal



Dimensions

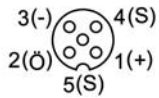


PIN assignment

490072



490073



| Description | Part-No. | Type | PU | |
|--|-------------------|-----------------------------|-----------------|----|
| Male | | | | |
| Number of terminations | 5 | 490072 | STGK5-M12 (C)-B | 10 |
| Female | | | | |
| Number of terminations | 5 | 490073 | KUGK5-M12 (C)-B | 10 |
| Technical data | | | | |
| | Male | Female | | |
| Rated voltage | | AC/DC 24 V | | |
| Nominal voltage range | | max. 60 V | | |
| Rated current | | 4 A | | |
| Number of terminations | | 5 | | |
| Cable length | | - | | |
| Status indication | | - | | |
| Current consumption per LED | | - | | |
| Coding | | B | | |
| Shielding | | 360° | | |
| General | | | | |
| Design | M12 x 1, male | M12 x 1, female | | |
| Test voltage | | 1.5 kV | | |
| Pollution degree | | 3 | | |
| Insulation resistance | | >10 ¹⁰ Ω | | |
| Contact resistance | | <3 mΩ | | |
| Class of flammability according to UL 94 | | V0 | | |
| IP rating | | IP 67, in screwed condition | | |
| Housing material | | Zinc diecast, nickel plated | | |
| Contact material | CuZn, gold-plated | CuSn, gold-plated | | |
| Thread material | | CuSn nickel plated | | |
| Gasket | | - | | |
| Cable construction | | - | | |
| Cable jacket | | - | | |
| Conductor insulation | | - | | |
| Cable diameter | | 6 – 8 mm | | |
| Bending radius | | - | | |
| Storage temperature range | | -40 °C – 90 °C | | |
| Temperature range connector | | -25 °C – 85 °C | | |
| Termination | | Screw terminal | | |
| Gauge | | max. 0,75 mm ² | | |
| Mechanical service life | | >100 insertion cycles | | |
| Weight (kg/piece) | | 0.040 | | |
| Approvals | | - | | |

Comments

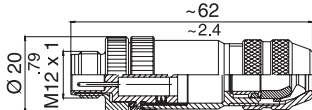
suitable for Profibus and Interbus.

Actuator sensor interface - M12 - connector

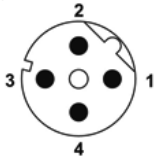
field wireable connector, M12 straight shielded
Male / female - D coded (Ethernet)
Screw terminal



Dimensions



PIN assignment



| Description | Part-No. | Type | PU |
|--|-----------------------------|-------------|----|
| Male | | | |
| Number of terminations | 4 | 490074 | 10 |
| Technical data | | Male | |
| Rated voltage | AC/DC 24 V | | |
| Nominal voltage range | max. 60 V | | |
| Rated current | 4 A | | |
| Number of terminations | 4 | | |
| Cable length | - | | |
| Status indication | - | | |
| Current consumption per LED | - | | |
| Coding | D | | |
| Shielding | 360° | | |
| General | | | |
| Design | M12 x 1, male | | |
| Test voltage | 2.95 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | >10 ¹⁰ Ω | | |
| Contact resistance | <3 mΩ | | |
| Class of flammability according to UL 94 | V0 | | |
| IP rating | IP 67, in screwed condition | | |
| Housing material | zinc diecast, nickel plated | | |
| Contact material | CuZn, gold-plated | | |
| Thread material | CuSn nickel plated | | |
| Gasket | - | | |
| Cable construction | - | | |
| Cable jacket | - | | |
| Conductor insulation | - | | |
| Cable diameter | 6 - 8 mm | | |
| Bending radius | - | | |
| Storage temperature range | -40 °C - 90 °C | | |
| Temperature range connector | -25 °C - 85 °C | | |
| Termination | Screw terminal | | |
| Gauge | 0,14-0,75 mm ² | | |
| Mechanical service life | >100 insertion cycles | | |
| Weight (kg/piece) | 0.050 | | |
| Approvals | - | | |

Comments

Ethernet suitable

Actuator sensor interface - M12 panel jack

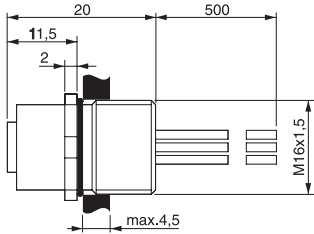
M12 connectors panel mounted using M16 thread

Male / female - A coded

0.5 m TPE wire



Dimensions



PIN assignment

490067



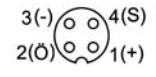
490068



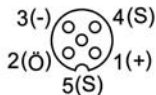
490069



490064



490065



490066



| Description | Part-No. | Type | PU | |
|------------------------|----------|--------|----------------|----|
| Male | | | | |
| Number of terminations | 4 | 490067 | STGE4-M12 0,5m | 10 |
| | 5 | 490068 | STGE5-M12 0,5m | 10 |
| | 8 | 490069 | STGE8-M12 0,5m | 10 |
| Female | | | | |
| Number of terminations | 4 | 490064 | KUGE4-M12 0,5m | 10 |
| | 5 | 490065 | KUGE5-M12 0,5m | 10 |
| | 8 | 490066 | KUGE8-M12 0,5m | 10 |

| Technical data | Male | | | Female | | |
|--|-----------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Rated voltage | AC/DC 24 V | | | | | |
| Nominal voltage range | max. 30 V | | | | | |
| Rated current | 4 A | 2 A | | 4 A | 2 A | |
| Number of terminations | 4 | 5 | 8 | 4 | 5 | 8 |
| Cable length | 0.5 | | | | | |
| Status indication | - | | | | | |
| Current consumption per LED | - | | | | | |
| Coding | A | | | | | |
| Shielding | - | | | | | |
| General | | | | | | |
| Design | M12 x 1, male | | | M12 x 1, female | | |
| Test voltage | 2.5 kV | 1.5 kV | 800 V | 2.5 kV | 1.5 kV | 800 V |
| Pollution degree | 3 | | | | | |
| Insulation resistance | >10 ¹⁰ Ω | | | | | |
| Contact resistance | <3 mΩ | | | | | |
| Class of flammability according to UL 94 | V0 | | | | | |
| IP rating | IP 67, in screwed condition | | | | | |
| Housing material | Zinc diecast, nickel plated | | | | | |
| Contact material | CuZn, gold-plated | | | | | |
| Thread material | CuSn nickel plated | | | | | |
| Gasket | - | | | NBR | | |
| Cable construction | 4x0.34 mm ² | 5x0.34 mm ² | 8x0.25 mm ² | 4x0.34 mm ² | 5x0.34 mm ² | 8x0.25 mm ² |
| Cable jacket | - | | | | | |
| Conductor insulation | TPE-wire, coloured | | | | | |
| Cable diameter | - | | | | | |
| Bending radius | - | | | | | |
| Storage temperature range | -40 °C – 90 °C | | | | | |
| Temperature range connector | -25 °C – 85 °C | | | | | |
| Termination | Thread M16 | | | | | |
| Gauge | 0,5 mm ² | | | | | |
| Mechanical service life | >100 insertion cycles | | | | | |
| Weight (kg/piece) | 0.022 | 0.023 | 0.025 | 0.022 | 0.023 | 0.025 |

| Approvals | - | | |
|-----------------|----------------|----------------|------------|
| Accessories | Article number | Type | Pkg. units |
| Counter nut M16 | 600361 | GMS M 16 x 1.5 | 100 |

Comments

Connection assignment

Pole / wire color:

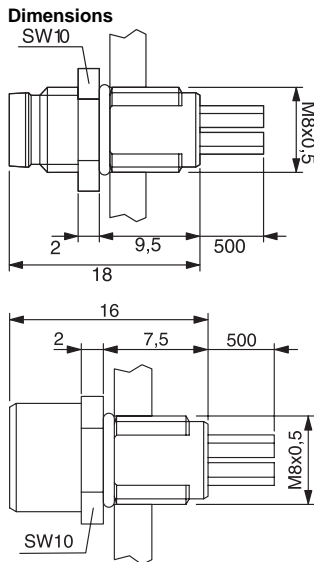
- 1/ BN (brown)
- 2/ WH (white)
- 3/ BU (blue)
- 4/ BK (black)

- 1/ BN (brown)
- 2/ WH (white)
- 3/ BU (blue)
- 4/ BK (black)
- 5/ GY (grey)

- 1/ WH (white)
- 2/ BN (brown)
- 3/ GN (green)
- 4/ YE (yellow)
- 5/ GY (grey)
- 6/ PK (pink)
- 7/ BU (blue)
- 8/ RD (red)

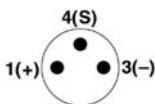
Actuator sensor interface - M8 panel jack

M8 panel connectors using M8 thread Male / female 0,5M TPE wire



PIN assignment

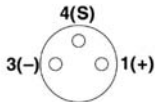
490062



490063



490060



490061



| Description | | Part-No. | Type | PU |
|--|-----------------------------|------------------------|------------------------|------------------------|
| Male | | | | |
| Number of terminations | 3 | 490062 | STGE3-M8 0,5m | 10 |
| | 4 | 490063 | STGE4-M8 0,5m | 10 |
| Female | | | | |
| Number of terminations | 3 | 490060 | KUGE3-M8 0,5m | 10 |
| | 4 | 490061 | KUGE4-M8 0,5m | 10 |
| Technical data | | | | |
| | | Male | | Female |
| Rated voltage | AC/DC 24 V | | | |
| Nominal voltage range | max. 30 V | | | |
| Rated current | 3 A | | | |
| Number of terminations | 3 | 4 | 3 | 4 |
| Cable length | 0.5 | | | |
| Status indication | - | | | |
| Current consumption per LED | - | | | |
| Coding | - | | | |
| Shielding | - | | | |
| General | | | | |
| Design | M8 x 1, male | | M8 x 1, female | |
| Test voltage | 1.5 kV | 0.8 kV | 1.5 kV | 0.8 kV |
| Pollution degree | 3 | | | |
| Insulation resistance | >10 ¹⁰ Ω | | | |
| Contact resistance | <3 mΩ | | | |
| Class of flammability according to UL 94 | HB | | | |
| IP rating | IP 67, in screwed condition | | | |
| Housing material | zinc diecast, nickel plated | | | |
| Contact material | CuZn, gold-plated | | | |
| Thread material | CuSn nickel plated | | | |
| Gasket | - | | | NBR |
| Cable construction | 3x0.25 mm ² | 4x0.25 mm ² | 3x0.25 mm ² | 4x0.25 mm ² |
| Cable jacket | - | | | |
| Conductor insulation | TPE-wire, coloured | | | |
| Cable diameter | - | | | |
| Bending radius | - | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Temperature range connector | -25°C – 85°C | | | |
| Termination | Thread M12 | | | |
| Gauge | 0,5 mm ² | | | |
| Mechanical service life | >100 insertion cycles | | | |
| Weight (kg/piece) | 0.012 | 0.014 | 0.012 | 0.014 |
| Approvals | - | | | |

Comments

Connection assignment

Pole / wire color:

- 1/ BN (brown)
- 3/ BU (blue)
- 4/ BK (black)

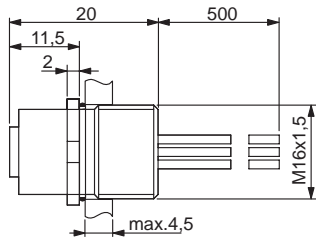
- 1/ BN (brown)
- 2/ WH (white)
- 3/ BU (blue)
- 4/ BK (black)

Actuator sensor interface - M12 - panel jack ETHERNET

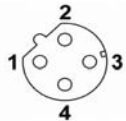
M12 panel connector using M16 thread Female - D coded 0,5M TPE wire



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|--|-----------------------------|----------------|--------------------|----|
| Female | | | | |
| Number of terminations | 4 | 490086 | KUGE4-M12 /ET 0,5m | 10 |
| Technical data | | | | |
| | | Female | | |
| Rated voltage | AC/DC 24 V | | | |
| Nominal voltage range | max. 30 V | | | |
| Rated current | 4 A | | | |
| Number of terminations | 4 | | | |
| Cable length | 0.5 | | | |
| Status indication | - | | | |
| Current consumption per LED | - | | | |
| Coding | D | | | |
| Shielding | - | | | |
| General | | | | |
| Design | M12 x 1, female | | | |
| Test voltage | 2.5 kV | | | |
| Pollution degree | 3 | | | |
| Insulation resistance | >10 ¹⁰ Ω | | | |
| Contact resistance | <3 mΩ | | | |
| Class of flammability according to UL 94 | HB | | | |
| IP rating | IP 67, in screwed condition | | | |
| Housing material | Zinc diecast, nickel plated | | | |
| Contact material | CuZn, gold-plated | | | |
| Thread material | CuSn nickel plated | | | |
| Gasket | NBR | | | |
| Cable construction | 4x0.34 mm ² | | | |
| Cable jacket | - | | | |
| Conductor insulation | TPE-wire, coloured | | | |
| Cable diameter | - | | | |
| Bending radius | - | | | |
| Storage temperature range | -40 °C – 90 °C | | | |
| Temperature range connector | -25 °C – 85 °C | | | |
| Termination | Thread M16 | | | |
| Gauge | 0,5 mm ² | | | |
| Mechanical service life | >100 insertion cycles | | | |
| Weight (kg/piece) | 0.019 | | | |
| Approvals | - | | | |
| Accessories | Article number | Type | Pkg. units | |
| Counter nut M16 | 600361 | GMS M 16 x 1.5 | 100 | |

Comments

Connection assignment

Pole / wire color:

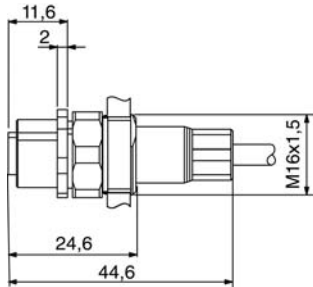
- 1/ YE (Yellow)
- 2/ WH (White)
- 3/ OR (Orange)
- 4/ BU (Blue)

Actuator sensor interface - M12 - panel jack ETHERNET

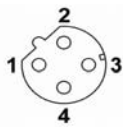
M12 panel connector using M16 thread Including Ethernet Cable Female - Ethernet D coded Dial cable, shielded



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|------------------------|----|
| Female | | | | |
| Cable length | 0.5 | 490082 | KUGE4-M12 /ET 0,5m PUR | 10 |
| | 1.0 | 490083 | KUGE4-M12 /ET 1,0m PUR | 10 |
| | 2.0 | 490084 | KUGE4-M12 /ET 2,0m PUR | 10 |
| | 5.0 | 490085 | KUGE4-M12 /ET 5,0m PUR | 10 |

| Technical data | | Female | | |
|--|-------|-----------------------------|-------|-------|
| Rated voltage | | AC/DC 24 V | | |
| Nominal voltage range | | max. 30 V | | |
| Rated current | | 4 A | | |
| Number of terminations | | 4 | | |
| Cable length | 0.5 | 1.0 | 2.0 | 5.0 |
| Status indication | | - | | |
| Current consumption per LED | | - | | |
| Coding | | D | | |
| Shielding | | 360° | | |
| General | | | | |
| Design | | M12 x 1, female | | |
| Test voltage | | 2.5 kV | | |
| Pollution degree | | 3 | | |
| Insulation resistance | | >10 ¹⁰ Ω | | |
| Contact resistance | | <3 mΩ | | |
| Class of flammability according to UL 94 | | HB | | |
| IP rating | | IP 67, in screwed condition | | |
| Housing material | | Zinc diecast, nickel plated | | |
| Contact material | | CuZn, gold-plated | | |
| Thread material | | CuSn nickel plated | | |
| Gasket | | NBR | | |
| Cable construction | | 2 x 2 x AWG 26/7 | | |
| Cable jacket | | - | | |
| Conductor insulation | | Ethernet-cable | | |
| Cable diameter | | 6.7 mm | | |
| Bending radius | | 15 x cable diameter | | |
| Storage temperature range | | -40 °C – 80 °C | | |
| Temperature range connector | | -25°C – 80°C | | |
| Temperature range cable fixed | | | | |
| Temperature range cable moving | | | | |
| Weight (kg/piece) | 0.055 | 0.078 | 0.133 | 0.281 |

| Approvals | - | | |
|-----------------|----------------|----------------|------------|
| Accessories | Article number | Type | Pkg. units |
| Counter nut M16 | 600361 | GMS M 16 x 1.5 | 100 |

Comments

Connection assignment

Pole / wire color:

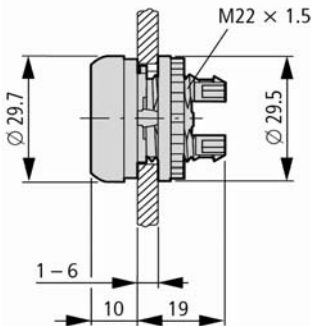
- 1/ YE (Yellow)
- 2/ WH (White)
- 3/ OR (Orange)
- 4/ BU (Blue)

Actuator sensor interface - USB-panel connector

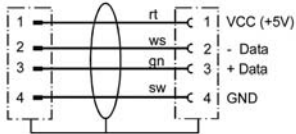
USB-panel connector for front installation with M22 thread
 USB connector Typ A on straight USB plug Type A with PVC cable
 Type: UBS-2.0 A/A



Dimensions



PIN assignment



| Description | Part-No. | Type | PU | |
|--------------|----------|--------|----------------------|----|
| USB | | | | |
| Cable length | 0.3 | 499991 | USB-2.0 A/A 0,3m PVC | 10 |
| | 0.6 | 499992 | USB-2.0 A/A 0,6m PVC | 10 |
| | 0.8 | 490076 | USB-2.0 A/A 0,8m PVC | 10 |
| | 1.5 | 490078 | USB-2.0 A/A 1,5m PVC | 10 |
| | 2.0 | 490079 | USB-2.0 A/A 2,0m PVC | 10 |
| | 3.0 | 490080 | USB-2.0 A/A 3,0m PVC | 10 |
| | 5.0 | 490081 | USB-2.0 A/A 5,0m PVC | 10 |

| Technical data | | USB | | | | | | |
|--|---|--|--|--|--|--|--|--|
| Rated voltage | | AC/DC 5 V | | | | | | |
| Nominal voltage range | | max. 30 V | | | | | | |
| Rated current | | 500 mA | | | | | | |
| Number of terminations | | 4 | | | | | | |
| Cable length | 0.3 0.6 0.8 1.5 2.0 3.0 5.0 | | | | | | | |
| Transfer rate | | max. 480 mbit/s | | | | | | |
| USB standard | | 2.0 | | | | | | |
| Contact type | | 1 : 1 | | | | | | |
| Shielding | | ja | | | | | | |
| General | | USB-A | | | | | | |
| Design | | USB-A | | | | | | |
| Test voltage | | - | | | | | | |
| Pollution degree | | 3 | | | | | | |
| Insulation resistance | | $>10^{10}\Omega$ | | | | | | |
| Contact resistance | | $<30\text{ m}\Omega$ | | | | | | |
| Class of flammability according to UL 94 | | V0 | | | | | | |
| IP rating | | IP 65 in closed and IP 20 in inserted condition | | | | | | |
| Housing material | | Connector: PA; plug: PBT, cover: PE | | | | | | |
| Contact material | | CuSn, gold-plated | | | | | | |
| Field installation | | Front plate cutout D=22.5mm | | | | | | |
| Cable construction | | Supply: 2xAWG24; Data: 2xAWG28 | | | | | | |
| Cable jacket | | PVC | | | | | | |
| Cable diameter | | 4.4 mm | | | | | | |
| Bending radius | | 20 x cable diameter | | | | | | |
| Storage temperature range | | $-25\text{ }^{\circ}\text{C} - 80\text{ }^{\circ}\text{C}$ | | | | | | |
| Operation temperature range | | $0\text{ }^{\circ}\text{C} - 70\text{ }^{\circ}\text{C}$ | | | | | | |
| Temperature range connector | | - | | | | | | |
| Mechanical service life | | >100 insertion cycles | | | | | | |
| Dimension | | (DxT) 29.5 x 29 mm, installation depth appr. 70 mm | | | | | | |
| Weight (kg/piece) | 0.035 0.040 0.055 0.060 0.065 0.090 0.110 | | | | | | | |
| Approvals | | - | | | | | | |

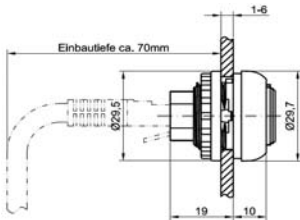
Comments
 Included in the delivery: captive safety cap

Actuator sensor interface - RJ45 panel connector

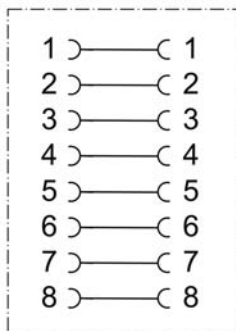
RJ45 panel connector for front installation RJ45 connector to RJ45 connector Category III



Dimensions

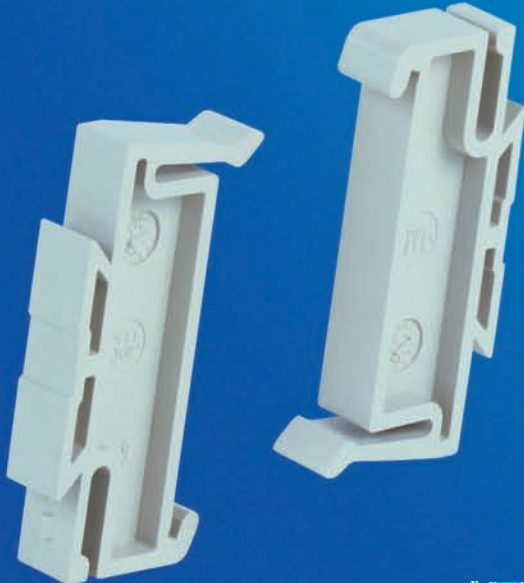
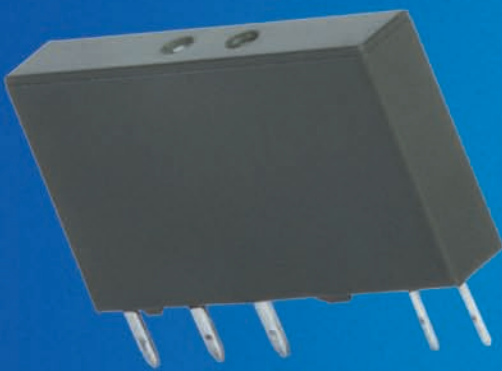
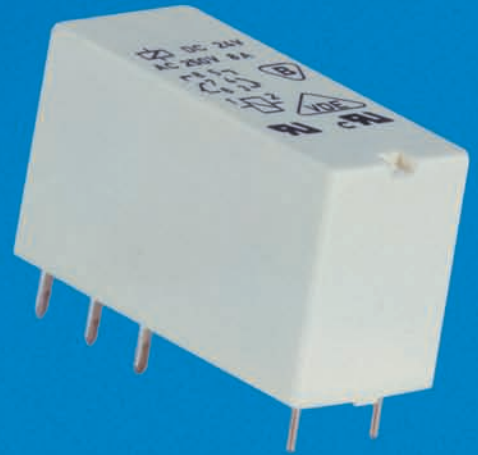
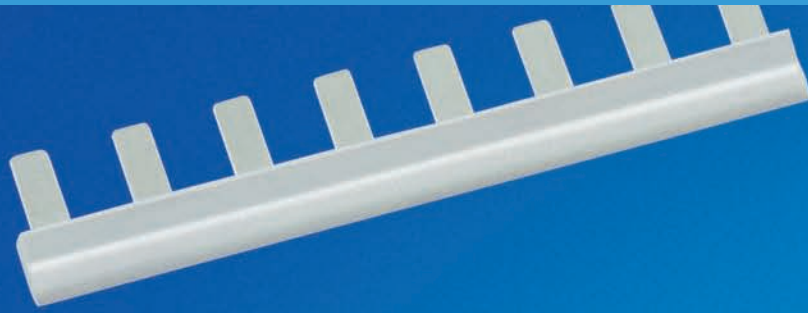


PIN assignment



| Description | Part-No. | Type | PU |
|--|----------|--|----|
| RJ45 | | | |
| Cable length | 490075 | RJ45 Cat.3 8/8 | 1 |
| Technical data | | RJ45 | |
| Rated voltage | | AC 24 V | |
| Nominal voltage range | | AC 150 V | |
| Rated current | | 1.5 A | |
| Number of terminations | | 8 | |
| Cable length | | - | |
| Transfer rate | | CAT III, max. 16 mbit/s | |
| USB standard | | - | |
| Contact type | | 1 : 1 | |
| Shielding | | - | |
| General | | | |
| Design | | RJ45 | |
| Test voltage | | - | |
| Pollution degree | | 3 | |
| Insulation resistance | | >500 MΩ | |
| Contact resistance | | - | |
| Class of flammability according to UL 94 | | V0 | |
| IP rating | | IP 65 in closed and IP 20 in inserted condition | |
| Housing material | | PA-GF 25, cover: PE | |
| Contact material | | CuSn, gold-plated | |
| Field installation | | Front plate cutout D=22.5mm | |
| Cable construction | | 8 (4-pair) | |
| Cable jacket | | - | |
| Cable diameter | | - | |
| Bending radius | | - | |
| Storage temperature range | | -25 °C – 80 °C | |
| Operation temperature range | | -25°C – 70°C (Class T3 according to EN 30155) | |
| Temperature range connector | | - | |
| Mechanical service life | | >100 insertion cycles | |
| Dimension | | (D×T) 29.5 × 29 mm, installation depth appr. 70 mm | |
| Weight (kg/piece) | | 0.045 | |
| Approvals | | - | |
| Comments | | | |
| Included in the delivery: captive safety cap | | | |

7. Accessories

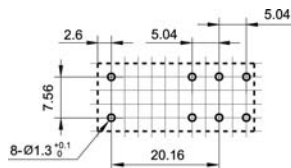
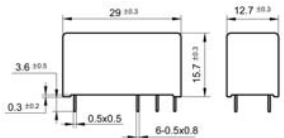


Accessories - Relay

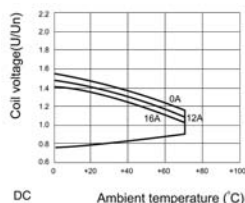
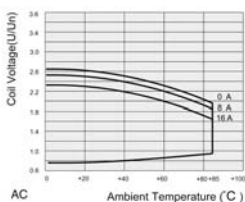
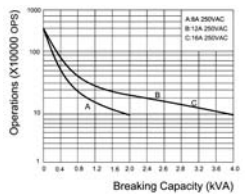
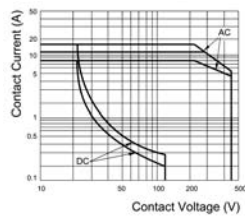
Replacement relay, 1 directional contact, pluggable relay
 AC 400V/DC 300V, 16A, 4000VA
 Contact material: AgNi, AgNi + +5 µm HV



Dimensions



Limit curve



| Description | Part-No. | Type | PU | |
|----------------------------------|----------|--------|-------------------|----|
| Relay with AgNi | | | | |
| Rated voltage | DC 12 V | 770100 | RE1W-0100 DC12 | 10 |
| | DC 24 V | 770101 | RE1W-0101 DC24 | 10 |
| | DC 110 V | 770106 | RE1W-0106 DC120 | 10 |
| | AC 12 V | 770110 | RE1W-0110 AC12 | 10 |
| | AC 24 V | 770111 | RE1W-0111 AC24 | 10 |
| | AC 115 V | 770116 | RE1W-0116 AC120 | 10 |
| | AC 230 V | 770117 | RE1W-0117 AC230 | 10 |
| Relay with AgNi + 5 µm HV | | | | |
| Rated voltage | DC 12 V | 770120 | RE1WHV-0120 DC12 | 10 |
| | DC 24 V | 770121 | RE1WHV-0121 DC24 | 10 |
| | DC 110 V | 770126 | RE1WHV-0126 DC120 | 10 |
| | AC 12 V | 770130 | RE1WHV-0130 AC12 | 10 |
| | AC 24 V | 770131 | RE1WHV-0131 AC24 | 10 |
| | AC 115 V | 770136 | RE1WHV-0136 AC120 | 10 |
| | AC 230 V | 770137 | RE1WHV-0137 AC230 | 10 |

Input

| | |
|--------------------------------|-----------------------------|
| Rated voltage | AC:12...240V; DC: 12...110V |
| Input voltage | AC: ±30%, DC: ±20% |
| Rated current | - A |
| Power consumption | AC: 0.75VA, DC: 0.4 W |
| Interrupting voltage | AC: ≥0.15 Un, DC: >0.1 Un |
| Input characteristic impedance | - |
| Status indication | - |

Output

| | |
|---|---|
| Contact type | 1 change over contact |
| Min. switching voltage | AC/DC 5 V |
| Max. switching voltage | AC 400V, DC 300V |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+ 5µm HV: AC/DC 2mA |
| Max. switching current | AC1: 16A / 250VAC, DC1: 16A / 24VDC |
| Switching capacity DC 13 | 24V: 2A, 115V: 300mA, 230V: 150mA |
| Switching capacity AC 15 | 3.3A |
| Inrush current | 30A (4ms) |
| Max. switching capacity | 4000 VA |
| Resistor | < 100 mΩ |
| Contact material | AgNi / AgNi+5µm HV |
| Switching frequency | AC1: 600 cycles/hour, without load 72,000 cycles/hour |
| Mechanical service life | >3 × 10 ⁷ operations |
| Switch-on delay | 15 ms |
| Switch-off delay | 8 ms |
| Clearance/creep. dist. (contol/load side) | > 10mm |

| | |
|-------------------------------------|------------------------|
| Rated insulation voltage (EN 50178) | AC 400V (C 250/ B 400) |
| Overvoltage category | III |
| Pollution degree | 3 |

General

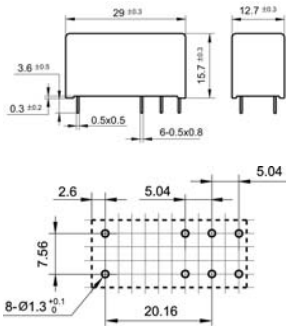
| | |
|---------------------------------|-----------------------|
| Protection class | RTII - flux-tight |
| Shock resistance | 10 g |
| Vibration resistance | 10g, 10...150Hz |
| Insulation voltage input/output | 5.0 kV _{eff} |
| Safe isolation | yes |
| Operation temperature range | -40 – 70 °C |
| Storage temperature range | -40 – 85 °C |
| Dimensions (w x h x d) | 29.0 × 15.7 × 12.7 mm |
| Weight (kg/piece) | 0.014 |
| Approvals | UL, CSA, VDE |
| Termination | plug-in |

Accessories - Relay

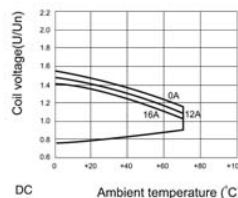
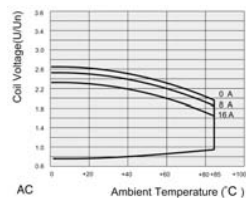
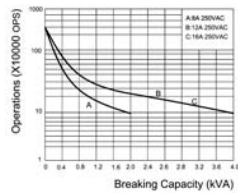
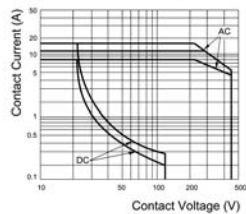
Replacement relay, 2 directional contact, pluggable relay
AC 400V/DC 300V, 8A, 2000VA
Contact material: AgNi, AgNi + +5 µm HV



Dimensions



Limit curve



| Description | Part-No. | Type | PU | |
|---|---|--------|-------------------|----|
| Relay with AgNi | | | | |
| Rated voltage | DC 12 V | 770918 | RE2W-0918 DC12 | 10 |
| | DC 24 V | 770920 | RE2W-0920 DC24 | 10 |
| | DC 110 V | 770922 | RE2W-0922 DC120 | 10 |
| | AC 12 V | 770926 | RE2W-0926 AC12 | 10 |
| | AC 24 V | 770928 | RE2W-0928 AC24 | 10 |
| | AC 120 V | 770930 | RE2W-0930 AC120 | 10 |
| | AC 230 V | 770924 | RE2W-0924 AC230 | 10 |
| Relay with AgNi + 5 µm HV | | | | |
| Rated voltage | DC 12 V | 770919 | RE2WHV-0919 DC12 | 10 |
| | DC 24 V | 770921 | RE2WHV-0921 DC24 | 10 |
| | DC 110 V | 770923 | RE2WHV-0923 DC120 | 10 |
| | AC 12 V | 770927 | RE2WHV-0927 AC12 | 10 |
| | AC 24 V | 770929 | RE2WHV-0929 AC24 | 10 |
| | AC 120 V | 770931 | RE2WHV-0931 AC120 | 10 |
| | AC 230 V | 770925 | RE2WHV-0925 AC230 | 10 |
| Input | | | | |
| Rated voltage | AC:12...240V; DC: 12...110V | | | |
| Input voltage | AC: ±30%, DC: ±20% | | | |
| Rated current | - A | | | |
| Power consumption | AC: 0.75VA, DC: 0.4 W | | | |
| Interrupting voltage | AC: ≥0.15 Un, DC: >0.1 Un | | | |
| Input characteristic impedance | - | | | |
| Status indication | - | | | |
| Output | | | | |
| Contact type | 2 change over contact | | | |
| Min. switching voltage | AC/DC 5 V | | | |
| Max. switching voltage | AC 400V, DC 300V | | | |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+ 5µm HV: AC/DC 2mA | | | |
| Max. switching current | AC1: 8A / 250VAC, DC1: 8A / 24VDC | | | |
| Switching capacity DC 13 | 24V: 2A, 115V: 300mA, 230V: 150mA | | | |
| Switching capacity AC 15 | 3.3A | | | |
| Inrush current | 15A (4ms) | | | |
| Max. switching capacity | 2000 VA | | | |
| Resistor | < 100 mΩ | | | |
| Contact material | AgNi / AgNi+5µm HV | | | |
| Switching frequency | AC1: 600 cycles/hour, without load 72,000 cycles/hour | | | |
| Mechanical service life | >3 × 10 ⁷ operations | | | |
| Switch-on delay | 15 ms | | | |
| Switch-off delay | 8 ms | | | |
| Clearance/creep. dist. (contol/load side) | > 10mm | | | |
| Rated insulation voltage (EN 50178) | AC 400V (C 250/ B 400) | | | |
| Overvoltage category | III | | | |
| Pollution degree | 3 | | | |
| General | | | | |
| Protection class | RTII - flux-tight | | | |
| Shock resistance | 10 g | | | |
| Vibration resistance | 10g, 10...150Hz | | | |
| Insulation voltage input/output | 5.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -40 – 70 °C | | | |
| Storage temperature range | -40 – 85 °C | | | |
| Dimensions (w x h x d) | 29.0 x 15.7 x 12.7 mm | | | |
| Weight (kg/piece) | 0.014 | | | |
| Approvals | UL, CSA, VDE | | | |
| Termination | plug-in | | | |

Accessories - Relay

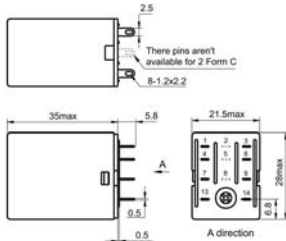
Replacement relay, 2 directional contact, pluggable relay

AC/DC 250V, 7A, 1750VA

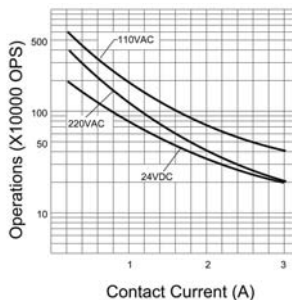
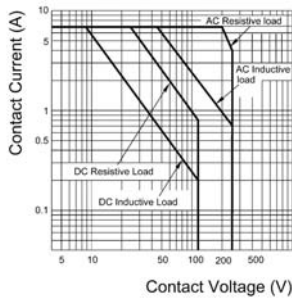
Contact material: AgNi, AgNi + +5 µm HV



Dimensions



Limit curve



| Description | Part-No. | Type | PU | |
|----------------------------------|----------|--------|-------------------|----|
| Relay with AgNi | | | | |
| Rated voltage | DC 12 V | 770500 | RE2W-0500 DC12 | 10 |
| | DC 24 V | 770501 | RE2W-0501 DC24 | 10 |
| | DC 110 V | 770506 | RE2W-0506 DC120 | 10 |
| | AC 12 V | 770510 | RE2W-0510 AC12 | 10 |
| | AC 24 V | 770511 | RE2W-0511 AC24 | 10 |
| | AC 115 V | 770516 | RE2W-0516 AC120 | 10 |
| | AC 230 V | 770517 | RE2W-0517 AC230 | 10 |
| Relay with AgNi + 5 µm HV | | | | |
| Rated voltage | DC 12 V | 770520 | RE2WHV-0520 DC12 | 10 |
| | DC 24 V | 770521 | RE2WHV-0521 DC24 | 10 |
| | DC 110 V | 770526 | RE2WHV-0526 DC120 | 10 |
| | AC 12 V | 770530 | RE2WHV-0530 AC12 | 10 |
| | AC 24 V | 770531 | RE2WHV-0531 AC24 | 10 |
| | AC 115 V | 770536 | RE2WHV-0536 AC120 | 10 |
| | AC 230 V | 770537 | RE2WHV-0537 AC230 | 10 |

Input

| | |
|--------------------------------|-----------------------------|
| Rated voltage | AC:12...240V; DC: 12...110V |
| Input voltage | AC: ±20%, DC: ±10% |
| Rated current | - A |
| Power consumption | AC: 1.2VA, DC: 0.9W |
| Interrupting voltage | AC: ≥0.2 Un, DC: >0.1 Un |
| Input characteristic impedance | - |
| Status indication | - |

Output

| | |
|---|---|
| Contact type | 2 change over contact |
| Min. switching voltage | AC/DC 5 V |
| Max. switching voltage | AC/DC 250 V |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+ 5µm HV: AC/DC 2mA |
| Max. switching current | AC1: 7A / 250VAC, DC1: 7A / 30VDC |
| Switching capacity DC 13 | 24V: 2A, 115V: 300mA, 230V: 150mA |
| Switching capacity AC 15 | 3.3A |
| Inrush current | 20A (4ms) |
| Max. switching capacity | 1750 VA |
| Resistor | < 100 mΩ |
| Contact material | AgNi / AgNi+5µm HV |
| Switching frequency | AC1: 1,200 cycles/hour, without load 18,000 cycles/hour |
| Mechanical service life | >2 × 10 ⁷ operations |
| Switch-on delay | 25 ms |
| Switch-off delay | 25 ms |
| Clearance/creep. dist. (contol/load side) | Clearance distance: > 2.5 mm; creepage distance: > 4mm |
| Rated insulation voltage (EN 50178) | AC 250V (C 250) |
| Overvoltage category | III |
| Pollution degree | 3 |
| General | |
| Protection class | RTI - dust proof |
| Shock resistance | 10 g |
| Vibration resistance | 5g, 10...55Hz |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Safe isolation | - |
| Operation temperature range | -40 – 70 °C |
| Storage temperature range | -40 – 85 °C |
| Dimensions (w x h x d) | 28.0 × 21.2 × 35.0 mm |
| Weight (kg/piece) | 0.037 |
| Approvals | cULus, TÜV, CQC |
| Termination | plug-in |

Accessories - Relay

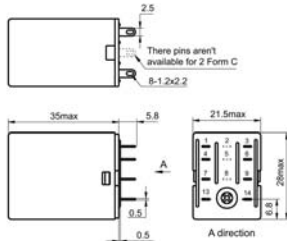
Replacement relay, 3 directional contact, pluggable relay

AC/DC 250V, 7A, 1750VA

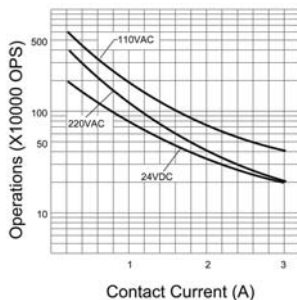
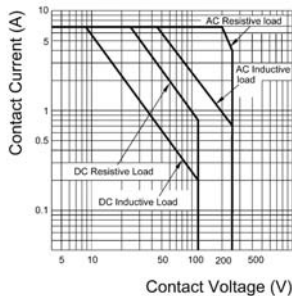
Contact material: AgNi, AgNi + +5 µm HV



Dimensions



Limit curve



| Description | Part-No. | Type | PU | |
|---|---|--------|-------------------|----|
| Relay with AgNi | | | | |
| Rated voltage | DC 12 V | 770300 | RE3W-0300 DC12 | 10 |
| | DC 24 V | 770301 | RE3W-0301 DC24 | 10 |
| | DC 110 V | 770306 | RE3W-0306 DC120 | 10 |
| | AC 12 V | 770310 | RE3W-0310 AC12 | 10 |
| | AC 24 V | 770311 | RE3W-0311 AC24 | 10 |
| | AC 115 V | 770316 | RE3W-0316 AC120 | 10 |
| | AC 230 V | 770317 | RE3W-0317 AC230 | 10 |
| Relay with AgNi + 5 µm HV | | | | |
| Rated voltage | DC 12 V | 770320 | RE3WHV-0320 DC12 | 10 |
| | DC 24 V | 770321 | RE3WHV-0321 DC24 | 10 |
| | DC 110 V | 770326 | RE3WHV-0326 DC120 | 10 |
| | AC 12 V | 770330 | RE3WHV-0330 AC12 | 10 |
| | AC 24 V | 770331 | RE3WHV-0331 AC24 | 10 |
| | AC 115 V | 770336 | RE3WHV-0336 AC120 | 10 |
| | AC 230 V | 770337 | RE3WHV-0337 AC230 | 10 |
| Input | | | | |
| Rated voltage | AC:12...240V; DC: 12...110V | | | |
| Input voltage | AC: ±20%, DC: ±10% | | | |
| Rated current | - A | | | |
| Power consumption | AC: 1.2VA, DC: 0.9W | | | |
| Interrupting voltage | AC: ≥0.2 Un, DC: >0.1 Un | | | |
| Input characteristic impedance | - | | | |
| Status indication | - | | | |
| Output | | | | |
| Contact type | 3 change over contact | | | |
| Min. switching voltage | AC/DC 5 V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+ 5µm HV: AC/DC 2mA | | | |
| Max. switching current | AC1: 7A / 250VAC, DC1: 7A / 24VDC | | | |
| Switching capacity DC 13 | 24V: 2A, 115V: 300mA, 230V: 150mA | | | |
| Switching capacity AC 15 | 3.3A | | | |
| Inrush current | 14A (4ms) | | | |
| Max. switching capacity | 1750 VA | | | |
| Resistor | < 100 mΩ | | | |
| Contact material | AgNi / AgNi+5µm HV | | | |
| Switching frequency | AC1: 1,200 cycles/hour, without load 18,000 cycles/hour | | | |
| Mechanical service life | >2 × 10 ⁷ operations | | | |
| Switch-on delay | 25 ms | | | |
| Switch-off delay | 25 ms | | | |
| Clearance/creep. dist. (contol/load side) | Clearance distance: > 2.5 mm; creepage distance: > 4mm | | | |
| Rated insulation voltage (EN 50178) | AC 250V (C 250) | | | |
| Overvoltage category | III | | | |
| Pollution degree | 3 | | | |
| General | | | | |
| Protection class | RT1 - dust proof | | | |
| Shock resistance | 10 g | | | |
| Vibration resistance | 5g, 10...55Hz | | | |
| Insulation voltage input/output | 1.5 kV _{eff} | | | |
| Safe isolation | - | | | |
| Operation temperature range | -40 – 70 °C | | | |
| Storage temperature range | -40 – 85 °C | | | |
| Dimensions (w × h × d) | 28.0 × 21.2 × 35.0 mm | | | |
| Weight (kg/piece) | 0.037 | | | |
| Approvals | cULus, TÜV, CQC | | | |
| Termination | plug-in | | | |

Accessories - Relay

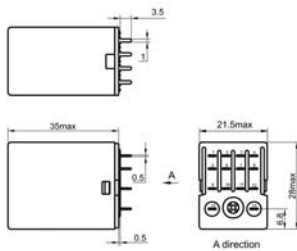
Replacement relay, 4 directional contact, pluggable relay

AC/DC 250V, 5A, 1250VA

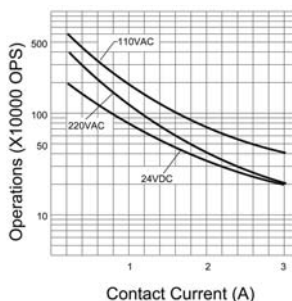
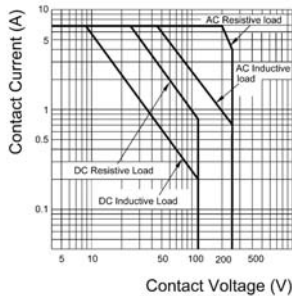
Contact material: AgNi, AgNi + +5 µm HV



Dimensions



Limit curve



| Description | Part-No. | Type | PU | |
|----------------------------------|----------|--------|-------------------|----|
| Relay with AgNi | | | | |
| Rated voltage | DC 12 V | 770400 | RE4W-0400 DC12 | 10 |
| | DC 24 V | 770401 | RE4W-0401 DC24 | 10 |
| | DC 110 V | 770406 | RE4W-0406 DC120 | 10 |
| | AC 12 V | 770410 | RE4W-0410 AC12 | 10 |
| | AC 24 V | 770411 | RE4W-0411 AC24 | 10 |
| | AC 115 V | 770416 | RE4W-0416 AC120 | 10 |
| | AC 230 V | 770417 | RE4W-0417 AC230 | 10 |
| Relay with AgNi + 5 µm HV | | | | |
| Rated voltage | DC 12 V | 770420 | RE4WHV-0420 DC12 | 10 |
| | DC 24 V | 770421 | RE4WHV-0421 DC24 | 10 |
| | DC 110 V | 770426 | RE4WHV-0426 DC120 | 10 |
| | AC 12 V | 770430 | RE4WHV-0430 AC12 | 10 |
| | AC 24 V | 770431 | RE4WHV-0431 AC24 | 10 |
| | AC 120 V | 770436 | RE4WHV-0436 AC120 | 10 |
| | AC 230 V | 770437 | RE4WHV-0437 AC230 | 10 |

Input

| | |
|--------------------------------|-----------------------------|
| Rated voltage | AC:12...240V; DC: 12...110V |
| Input voltage | AC: ±20%, DC: ±10% |
| Rated current | - A |
| Power consumption | AC: 1.2VA, DC: 0.9W |
| Interrupting voltage | AC: ≥0.2 Un, DC: >0.1 Un |
| Input characteristic impedance | - |
| Status indication | - |

Output

| | |
|---|--|
| Contact type | 4 change over contact |
| Min. switching voltage | AC/DC 5 V |
| Max. switching voltage | AC/DC 250 V |
| Min. switching current | AgNi: AC/DC 5mA; AgNi+ 5µm HV: AC/DC 2mA |
| Max. switching current | AC1: 5A / 250VAC, DC1: 5A / 24VDC |
| Switching capacity DC 13 | 24V: 2A, 115V: 300mA, 230V: 150mA |
| Switching capacity AC 15 | 3.3A |
| Inrush current | 10A (4ms) |
| Max. switching capacity | 1250 VA |
| Resistor | < 100 mΩ |
| Contact material | AgNi / AgNi+5µm HV |
| Switching frequency | AC1: 1,200 cycles/hour, without load 18,000 cycles/hour |
| Mechanical service life | >2 × 10 ⁷ operations |
| Switch-on delay | 25 ms |
| Switch-off delay | 25 ms |
| Clearance/creep. dist. (contol/load side) | Clearance distance: > 1.6 mm; creepage distance: > 3.2mm |

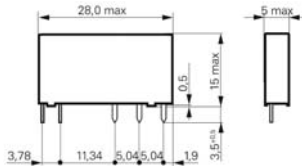
| | |
|-------------------------------------|-----------------------|
| Rated insulation voltage (EN 50178) | AC 250V (B 250) |
| Overvoltage category | III |
| Pollution degree | 3 |
| General | |
| Protection class | RTI - dust proof |
| Shock resistance | 10 g |
| Vibration resistance | 5g, 10...55Hz |
| Insulation voltage input/output | 1.5 kV _{eff} |
| Safe isolation | - |
| Operation temperature range | -40 – 70 °C |
| Storage temperature range | -40 – 85 °C |
| Dimensions (w x h x d) | 28.0 × 21.2 × 35.0 mm |
| Weight (kg/piece) | 0.037 |
| Approvals | cULus, TÜV, CQC |
| Termination | plug-in |

Accessories - Relay

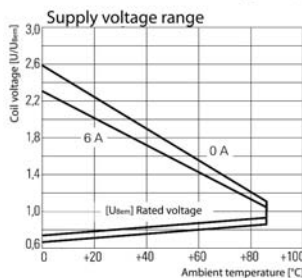
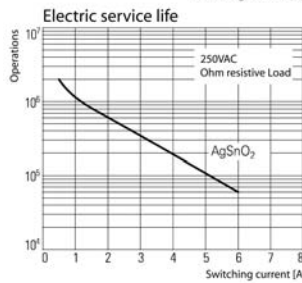
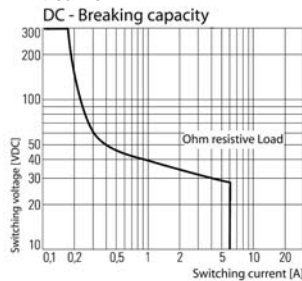
Replacement relay, 1 CO contact AC/DC 250V, 6A, 1500VA Contact material: AgSnO₂, AgSnO₂+5μm HV



Dimensions



Limit curve



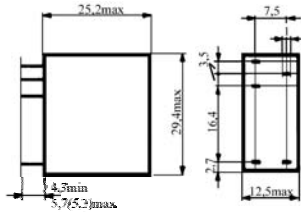
| Description | Part-No. | Type | PU | |
|---|--|--------|-----------------------|----|
| Relay with AgSnO₂ | | | | |
| Rated voltage | DC 12 V | 768001 | Relais-SNR 12V 1W | 20 |
| | DC 24 V | 768002 | Relais-SNR 24V 1W | 20 |
| | DC 60 V | 768003 | Relais-SNR 60V 1W | 20 |
| Relay with AgSnO₂ + 5 μm HV | | | | |
| Rated voltage | DC 12 V | 768005 | Relais-SNR 12V 1W HTV | 20 |
| | DC 24 V | 768006 | Relais-SNR 24V 1W HTV | 20 |
| | DC 60 V | 768007 | Relais-SNR 60V 1W HTV | 20 |
| Input | | | | |
| Rated voltage | DC: 12...60V | | | |
| Input voltage | DC: ±30% | | | |
| Rated current | - A | | | |
| Power consumption | DC: 170mW | | | |
| Interrupting voltage | DC: >0.1 Un | | | |
| Input characteristic impedance | - | | | |
| Status indication | - | | | |
| Output | | | | |
| Contact type | 1 change over contact | | | |
| Min. switching voltage | AgSnO ₂ : AC/DC 17V; AgSnO ₂ +5μm HV: AC/DC 1V | | | |
| Max. switching voltage | AC/DC 250 V | | | |
| Min. switching current | AgSnO ₂ : AC/DC 5mA; AgSnO ₂ + 5μm HV: AC/DC 1mA | | | |
| Max. switching current | 6A | | | |
| Switching capacity DC 13 | 24V: 1A, 115V: 200mA, 230V: 100mA | | | |
| Switching capacity AC 15 | 3A | | | |
| Inrush current | 10A (4ms) | | | |
| Max. switching capacity | 1500 VA | | | |
| Resistor | AgSnO ₂ : < 100mΩ; AgSnO ₂ +5μm HV: < 30mΩ | | | |
| Contact material | AgSnO ₂ / AgSnO ₂ +5μm HV | | | |
| Switching frequency | with load: 6 cycles/minute, without load 1,200 cycles/minute | | | |
| Mechanical service life | >5 × 10 ⁶ operations | | | |
| Switch-on delay | 5 ms | | | |
| Switch-off delay | 2.5 ms | | | |
| Clearance/creep. dist. (contol/load side) | Clearance distance: > 6 mm; creepage distance: > 8mm | | | |
| Rated insulation voltage (EN 50178) | AC 250 V | | | |
| Overvoltage category | III | | | |
| Pollution degree | 3 | | | |
| General | | | | |
| Protection class | RTIII - wash-tight | | | |
| Shock resistance | 5 g | | | |
| Vibration resistance | 6g, 10...150Hz | | | |
| Insulation voltage input/output | 4.0 kV _{eff} | | | |
| Safe isolation | yes | | | |
| Operation temperature range | -25 – 60 °C | | | |
| Storage temperature range | -40 – 85 °C | | | |
| Dimensions (w × h × d) | 5.0 × 28.0 × 15.0 mm | | | |
| Weight (kg/piece) | 0.006 | | | |
| Approvals | VDE, cULus | | | |
| Termination | plug-in | | | |

Accessories - Relay

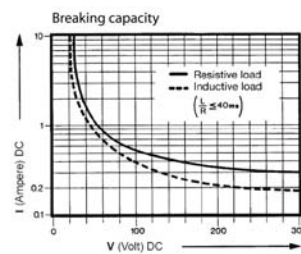
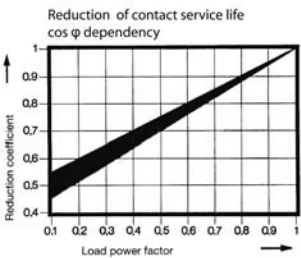
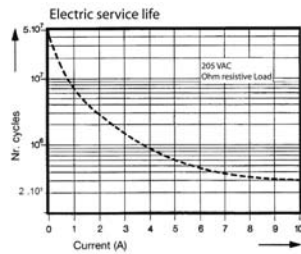
Replacement relay, 1 CO contact
 AC/DC 250V, 10A, 2500VA
 Contact material: AgSnO₂



Dimensions



Limit curve



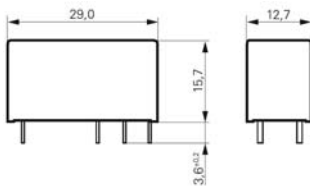
| Description | Part-No. | Type | PU |
|---|----------|--|-------------------|
| Relay with AgSnO₂ | | | |
| Rated voltage | DC 24 V | 712013 | LKSR-2013 DC 24 V |
| | | | 25 |
| Input | | | |
| Rated voltage | | DC 24V | |
| Input voltage | | DC: 19.7V – 35.7V | |
| Rated current | | – A | |
| Power consumption | | DC: 0.6W | |
| Interrupting voltage | | DC: >0.1 Un | |
| Input characteristic impedance | | – | |
| Status indication | | – | |
| Output | | | |
| Contact type | | 1 change over contact | |
| Min. switching voltage | | AC/DC 17 V | |
| Max. switching voltage | | AC/DC 250 V | |
| Min. switching current | | AC/DC 5mA | |
| Max. switching current | | 10A | |
| Switching capacity DC 13 | | 24V: 1A, 115V: 200mA, 230V: 100mA | |
| Switching capacity AC 15 | | 3A | |
| Inrush current | | 15A (4ms) | |
| Max. switching capacity | | 2500 VA | |
| Resistor | | – | |
| Contact material | | AgSnO ₂ | |
| Switching frequency | | – | |
| Mechanical service life | | >3 × 10 ⁷ operations | |
| Switch-on delay | | 10 ms | |
| Switch-off delay | | 5 ms | |
| Clearance/creep. dist. (contol/load side) | | Clearance distance: > 8 mm; creepage distance: > 8mm | |
| Rated insulation voltage (EN 50178) | | AC 250 V | |
| Overvoltage category | | III | |
| Pollution degree | | 3 | |
| General | | | |
| Protection class | | RTIII - wash-tight | |
| Shock resistance | | 5 g | |
| Vibration resistance | | 6g, 10...150Hz | |
| Insulation voltage input/output | | 4.0 kV _{eff} | |
| Safe isolation | | yes | |
| Operation temperature range | | -25 – 60 °C | |
| Storage temperature range | | -40 – 80 °C | |
| Dimensions (w x h x d) | | 12.5 × 29.4 × 25.5 mm | |
| Weight (kg/piece) | | 0.015 | |
| Approvals | | VDE; cULus | |
| Termination | | plug-in | |

Accessories - Relay

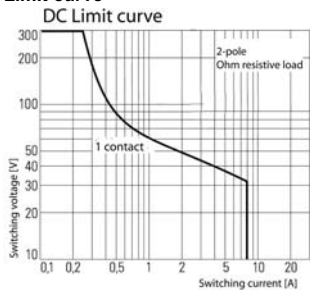
Backup relay, 2 CO contact AC/DC 250V, 8A, 2000VA Kontaktmaterial: AgNi



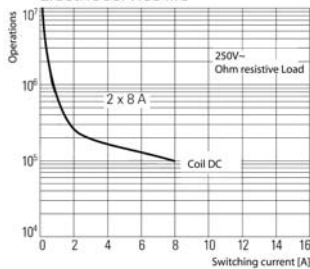
Dimensions



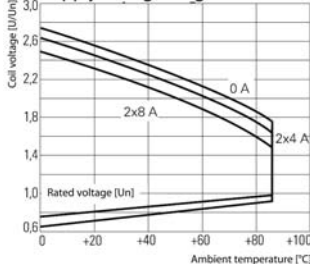
Limit curve



Electric service life



Supply voltage range DC



| Description | Part-No. | Type | PU |
|---|----------|---|-------------------|
| Relay with AgNi | | | |
| Rated voltage | DC 24 V | 712014 | LKSR-2014 DC 24 V |
| | | | 25 |
| Input | | | |
| Rated voltage | | DC 24V | |
| Input voltage | | DC: $\pm 30\%$ | |
| Rated current | | - A | |
| Power consumption | | DC: 0.4W | |
| Interrupting voltage | | DC: $> 0.1 U_n$ | |
| Input characteristic impedance | | - | |
| Status indication | | - | |
| Output | | | |
| Contact type | | 2 change over contact | |
| Min. switching voltage | | AC/DC 17 V | |
| Max. switching voltage | | AC/DC 250 V | |
| Min. switching current | | AC/DC 5mA | |
| Max. switching current | | 8A | |
| Switching capacity DC 13 | | 24V: 1A, 115V: 200mA, 230V: 100mA | |
| Switching capacity AC 15 | | 3A | |
| Inrush current | | 15A (4ms) | |
| Max. switching capacity | | 2000 VA | |
| Resistor | | - | |
| Contact material | | AgNi | |
| Switching frequency | | - | |
| Mechanical service life | | $> 3 \times 10^7$ operations | |
| Switch-on delay | | 10 ms | |
| Switch-off delay | | 5 ms | |
| Clearance/creep. dist. (contol/load side) | | Clearance distance: > 6 mm; creepage distance: > 8 mm | |
| Rated insulation voltage (EN 50178) | | AC 250 V | |
| Overvoltage category | | III | |
| Pollution degree | | 3 | |
| General | | | |
| Protection class | | RTIII - wash-tight | |
| Shock resistance | | 5 g | |
| Vibration resistance | | 6g, 10...150Hz | |
| Insulation voltage input/output | | 4.0 kV _{eff} | |
| Safe isolation | | yes | |
| Operation temperature range | | -25 - 60 °C | |
| Storage temperature range | | -40 - 80 °C | |
| Dimensions (w x h x d) | | 12.5 x 29.4 x 25.5 mm | |
| Weight (kg/piece) | | 0.015 | |
| Approvals | | VDE; cULus | |
| Termination | | plug-in | |

Accessories - Relay

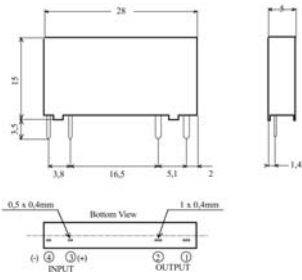
Solid State Relay, 1 N/O contact

AC: 275V; 0.75A

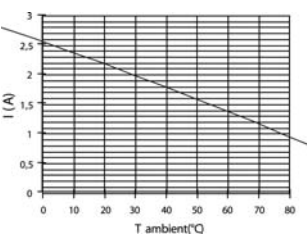
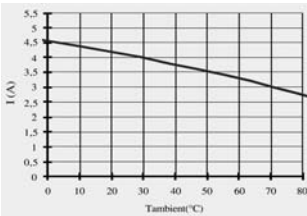
DC: max. 48V; max. 3A



Dimensions



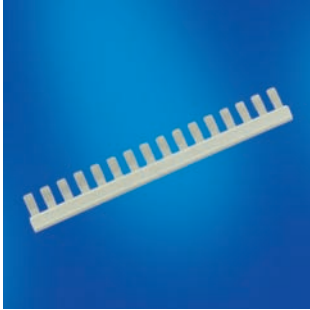
Limit curve



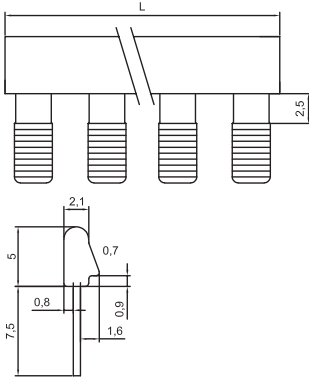
| Description | Part-No. | Type | PU |
|---|-------------------------|---------------|-------------------------|
| DC Output | | | |
| Rated voltage | DC 12 V | 768009 | SSR-DC12V/DC30V, 3A |
| | DC 24 V | 768011 | SSR-DC24V/DC48V, 0,1A |
| AC Output | | | |
| Rated voltage | DC 12 V | 768010 | SSR-DC12V/DC275V, 0,75A |
| | | | 20 |
| Input | | | |
| | 768009 | 768011 | 768010 |
| Rated voltage | DC 12 V | DC 24 V | DC 12 V |
| Input voltage | 7 – 20V | 16 – 30 V | 7 – 20V |
| Rated current | 0,01 A | 0,007 A | 0,01 A |
| Power consumption | 0.12 W | 0.17 W | 0.12 W |
| Interrupting voltage | 8.3 V | 10 V | 1 V |
| Input characteristic impedance | 1070 Ω | 4000 Ω | 1100 Ω |
| Status indication | – | | |
| Output | | | |
| Contact type | Transistor, N/O contact | | Triac, N/O contact |
| Min. switching voltage | DC 0.5 V | DC 5 V | AC 12 V |
| Max. switching voltage | DC 32 V | DC 48 V | AC 275 V |
| Min. switching current | DC 1mA | 1 mA | AC 5mA |
| Max. switching current | DC 4 A (Derating) | 100 mA | AC 2 A (Derating) |
| Switching capacity DC 13 | 4A | – | – |
| Switching capacity AC 15 | – | – | 2A |
| Inrush current | 10A (4ms) | – | 10A (4ms) |
| Max. switching capacity | – VA | – | 1000 VA |
| Switching capacity | 100 W | 4.5 W | – |
| Resistor | < 120 mΩ | < 10 Ω | – |
| Contact material | – | | |
| Switching frequency | 100Hz | < 100Hz | 50Hz |
| Mechanical service life | – | | |
| Switch-on delay | 50µs | 5 ms | 0.1 ms |
| Switch-off delay | 600µs | – | 10 ms |
| Clearance/creep. dist. (contol/load side) | – | | |
| Rated insulation voltage (EN 50178) | – | | |
| Overvoltage category | III | | |
| Pollution degree | 3 | | |
| General | | | |
| IP rating | IP 40 | | |
| Protection class | RTIII - wash-tight | | |
| Shock resistance | – g | | |
| Vibration resistance | – | | |
| Insulation voltage input/output | 2.5 kV _{eff} | – | 4.0 kV _{eff} |
| Safe isolation | yes | | |
| Operation temperature range | –20 – 60 °C | | |
| Storage temperature range | –25 – 80 °C | –40 – 70 °C | –40 – 100 °C |
| Dimensions (w x h x d) | 5.0 x 28.0 x 15.0 mm | | |
| Weight (kg/piece) | 0.008 | 0.004 | 0.008 |
| Approvals | UL submitted | cUL, UL | UL submitted |
| Termination | plug-in | | |

Accessories - Jumper combs

extrusion-coated bridge combs: 2 / 3 / 4 / 8 / 16 pole
for micro compact enclosure 6.2 mm (top wiring)
Colours: red, white, blue



Dimensions



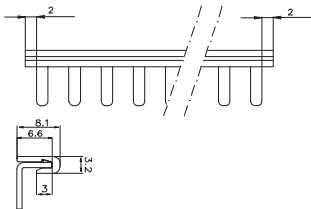
| Description | Part-No. | Type | PU | | |
|--|---|---------|-----------|---------|---------|
| 2-pole | | | | | |
| Colour | red | 762802 | BK 7-2802 | 10 | |
| | white | 762803 | BK 7-2803 | 10 | |
| | blue | 762804 | BK 7-2803 | 10 | |
| 3-pole | | | | | |
| Colour | red | 762805 | BK 7-2805 | 10 | |
| | white | 762806 | BK 7-2806 | 10 | |
| | blue | 762807 | BK 7-2807 | 10 | |
| 4-pole | | | | | |
| Colour | red | 762812 | BK 7-2812 | 10 | |
| | white | 762813 | BK 7-2813 | 10 | |
| | blue | 762814 | BK 7-2814 | 10 | |
| 8-pole | | | | | |
| Colour | red | 762822 | BK 7-2822 | 10 | |
| | white | 762823 | BK 7-2823 | 10 | |
| | blue | 762824 | BK 7-2824 | 10 | |
| 16-pole | | | | | |
| Colour | red | 762832 | BK 7-2832 | 10 | |
| | white | 762833 | BK 7-2833 | 10 | |
| | blue | 762834 | BK 7-2834 | 10 | |
| General | | | | | |
| Number of terminations | 2-pole | 3-pole | 4-pole | 8-pole | 16-pole |
| Rated current | 6 A | | | | |
| Contact material | CuZn | | | | |
| Contact type | Strength: 0.5 mm; with ribbing both-sides | | | | |
| Pin spacing | 6.2 mm | | | | |
| Housing material | Vectra C 1330 | | | | |
| Class of flammability according to UL 94 | V0 | | | | |
| Termination | plug-in | | | | |
| Storage temperature range | -40 – 80 °C | | | | |
| Operation temperature range | -40 – 80 °C | | | | |
| Length | 11.0 mm | 17.2 mm | 23.4 mm | 48.2 mm | 97.8 mm |
| Weight (kg/piece) | 0.0005 | 0.0008 | 0.0011 | 0.0022 | 0.0044 |

Accessories - Jumper combs

Jumper comb 24-pole for micro compact enclosure 6.2 mm Colour: blue



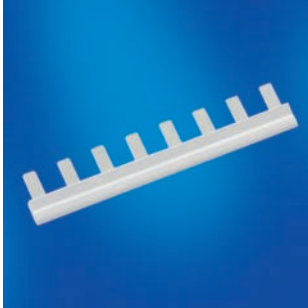
Dimensions



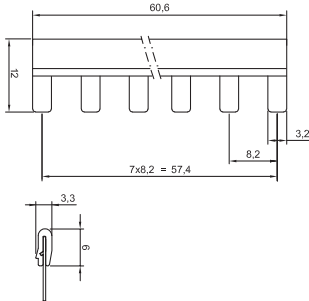
| Description | Part-No. | Type | PU |
|--|----------|--------------------------|-----------|
| 24-pole | | | |
| Colour | blue | 760801 | BK-6-0801 |
| | | | 5 |
| General | | | |
| Number of terminations | | 24-pole | |
| Rated current | | 26 A | |
| Contact material | | FeZn | |
| Contact type | | Strength: 0.5 mm; smooth | |
| Pin spacing | | 6.2 mm | |
| Housing material | | PVC hard | |
| Class of flammability according to UL 94 | | V0 | |
| Termination | | plug-in | |
| Storage temperature range | | -40 – 80 °C | |
| Operation temperature range | | -40 – 80 °C | |
| Length | | 144.8 mm | |
| Weight (kg/piece) | | 0.0090 | |

Accessories - Jumper combs

Jumper comb 8 pole for LOCC Box Colours: red, white, blue



Dimensions



| Description | Part-No. | Type | PU | |
|---------------|----------|--------|---------------------|---|
| 8-pole | | | | |
| Colour | white | 716428 | LOCC-Box-BKW 7-6428 | 5 |
| | red | 716429 | LOCC-Box-BKR 7-6429 | 5 |
| | blue | 716430 | LOCC-Box-BKB 7-6430 | 5 |

General

| | |
|--|--------------------------|
| Number of terminations | 8-pole |
| Rated current | 6 A |
| Contact material | FeZn |
| Contact type | Strength: 0.5 mm; smooth |
| Pin spacing | 8,2 mm |
| Housing material | PVC hard |
| Class of flammability according to UL 94 | V0 |
| Termination | plug-in |
| Storage temperature range | -40 – 80 °C |
| Operation temperature range | -40 – 80 °C |
| Length | 60.6 mm |
| Weight (kg/piece) | 0.0031 |

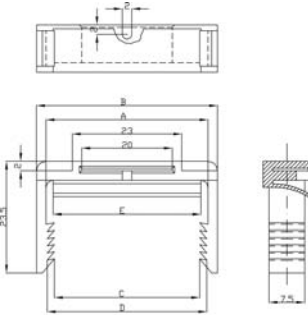
Accessories - Suppression Technology

Retaining clip for enclosure S1, S2 Colour: transparent



| Description | Part-No. | Type | PU | |
|--|----------------------|----------------------|---------|----|
| Colour | transparent | 700409 | Clip S1 | 10 |
| | transparent | 700419 | Clip S2 | 10 |
| General | 700409 | 700419 | | |
| Housing material | | Makrolon | | |
| Colour | | transparent | | |
| Class of flammability according to UL 94 | | V2 | | |
| Surface | | smooth | | |
| Termination | | on enclosure S1, S2 | | |
| Storage temperature range | | -20 – 60 °C | | |
| Operation temperature range | | -40 – 80 °C | | |
| Dimensions (w x h x d) | 38.0 x 23.5 x 7.5 mm | 45.5 x 23.5 x 7.5 mm | | |
| Weight (kg/piece) | | 0.0020 | | |
| Wire | | - | | |

Dimensions



| | 700409 | 700419 |
|---|--------|--------|
| A | 34 | 41.5 |
| B | 38 | 45.5 |
| C | 30.5 | 38 |
| D | 33.5 | 41 |
| E | 31 | 38.5 |

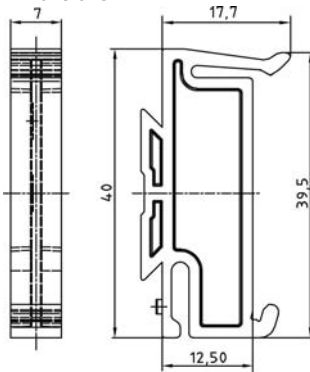
Accessories - Suppression Technology

Snap-on socket
for enclosure V1, VM1, V2, M1, M2, M3, M5
Colour: grey



| Description | Part-No. | Type | PU | |
|--|-------------------------------|---------------|---------------|----|
| Colour | grey, RAL 7035 | 700499 | Socket Type 2 | 10 |
| General | | 700499 | | |
| Housing material | Luranyl KR 2456-3 | | | |
| Colour | grey, RAL 7035 | | | |
| Class of flammability according to UL 94 | V1 | | | |
| Surface | smooth | | | |
| Termination | attachable to TS 35 (EN50022) | | | |
| Storage temperature range | -20 – 60 °C | | | |
| Operation temperature range | -40 – 80 °C | | | |
| Dimensions (w x h x d) | 7.0 x 39.5 x 20.7 mm | | | |
| Weight (kg/piece) | 0.0020 | | | |
| Wire | - | | | |

Dimensions



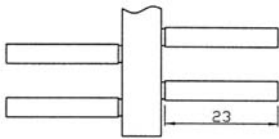
Accessories - Actuator sensor interface

Identification unit
closed
Colour: transparent



| Description | Part-No. | Type | PU | |
|--|----------------|---------------|---------------------|-----|
| Colour | white | 499988 | LB M 8/M 12 | 200 |
| | transparent | 499993 | Bezeichnungseinheit | 500 |
| | transparent | 499995 | Bezeichnungseinheit | 500 |
| General | 499988 | 499993 | 499995 | |
| Housing material | Ultradur B4520 | | PVC | |
| Colour | white | | transparent | |
| Class of flammability according to UL 94 | V2 | | V0 | |
| Surface | | | smooth | |
| Termination | | | - | |
| Storage temperature range | | | -50 – 80 °C | |
| Operation temperature range | | | -50 – 80 °C | |
| Dimensions (w x h x d) | | | | |
| Weight (kg/piece) | 0.0050 | | 0.0030 | |
| Wire | - | Ø 2-4mm | Ø 4-7mm | |

Dimensions



Accessories - Actuator sensor interface

Protective cover
M8, M12
Colour: black



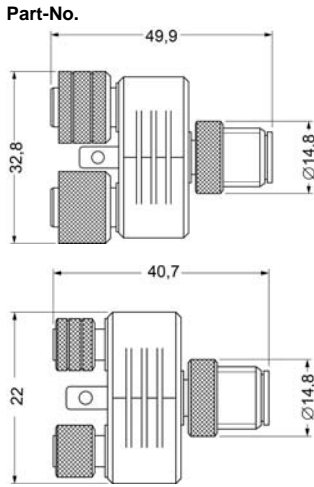
| Description | Part-No. | Type | PU | |
|--|---------------|-------------|---------------|----|
| Colour | black | 499989 | SK M 8 | 50 |
| | black | 499994 | SK M 12 | 50 |
| General | 499989 | | 499994 | |
| Housing material | | PVC | | |
| Colour | | black | | |
| Class of flammability according to UL 94 | | V0 | | |
| Surface | | - | | |
| Termination | M8 | | M12 | |
| Storage temperature range | | -20 – 80 °C | | |
| Operation temperature range | | -20 – 80 °C | | |
| Dimensions (w x h x d) | | | | |
| Weight (kg/piece) | | 0.0020 | | |
| Wire | | - | | |

Accessories - Actuator sensor interface

T piece

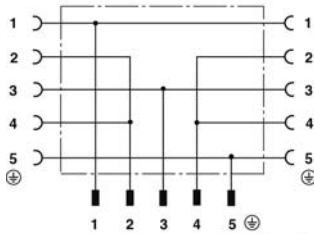
Plug M12 to 2x socket M12, 3-pole distributor PIN 2+4 used +PE

Plug M12 to 2x socket M8, 3-pole distributor

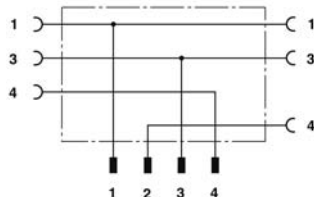


PIN assignment

490026



490038



| Description | Part-No. | Type | PU | |
|------------------------|----------|--------|-----------------|----|
| Number of terminations | 5 | 490026 | AST M 12/2xM 12 | 10 |
| | 3 | 490038 | AST M 12/2xM 8 | 10 |

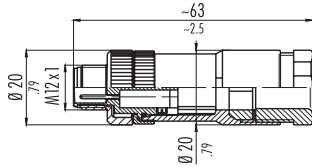
| Technical data | 490026 | 490038 | |
|--|-----------------------|-------------|-------------------|
| Rated voltage | AC/DC 24 V | | |
| Rated voltage | DC 60V | DC 30V | |
| Rated current | 4 A | 3 A | |
| Number of terminations | 5 | 3 | |
| Coding | A | | |
| General | | | |
| Termination | M12 | | |
| Rated insulation voltage (EN 50178) | 100 V | | |
| Test voltage | 1.5 kV | | |
| Pollution degree | 3 | | |
| Insulation resistance | ≥ 10GΩ | | |
| Resistor | ≤ 5mΩ | | |
| Class of flammability according to UL 94 | HB | | |
| Protection class | IP 65/ IP 67 | | |
| Housing material | TPU black | | |
| Contact material | CuZn | | |
| Thread material | CuSn nickel plated | | |
| Gasket | NBR | | |
| Storage temperature range | -25 – 90 °C | | |
| Operation temperature range | -25 – 90 °C | | |
| Weight (kg/piece) | 0.0290 | 0.0140 | |
| Approvals | - | | |
| Accessories | Article number | Type | Pkg. units |
| Dynamometric key M12 | 490091 | DM-SET M12 | 1 |

Accessories - Actuator sensor interface

Duo-plug M12 4-pole / 5-pole Screw terminal blocks



Part-No.



PIN assignment

490047



490048

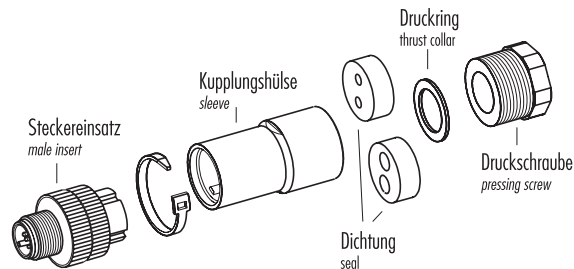


| Description | | Part-No. | Type | PU |
|------------------------|---|----------|--------------|----|
| Number of terminations | 4 | 490047 | STGD4 - M 12 | 10 |
| | 5 | 490048 | STGD5 - M 12 | 10 |

Technical data

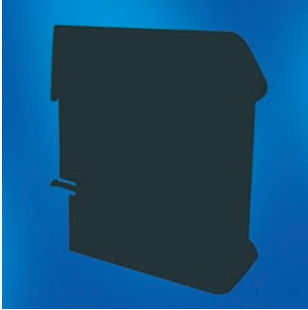
| | | | |
|--|-------------|--------------------|-------------|
| Rated voltage | AC/DC 24 V | | |
| Rated voltage | AC/DC 250 V | | AC/DC 125 V |
| Rated current | | 4 A | |
| Number of terminations | 4 | | 5 |
| Coding | | A | |
| General | | | |
| Termination | | M12 | |
| Rated insulation voltage (EN 50178) | | 250 V | |
| Test voltage | 2.95 kV | | 1.75 kV |
| Pollution degree | | 3 | |
| Insulation resistance | | ≥ 10GΩ | |
| Resistor | | ≤ 8mΩ | |
| Class of flammability according to UL 94 | | HB | |
| Protection class | | IP 67 | |
| Housing material | | PA 66 black | |
| Contact material | | CuZn | |
| Thread material | | CuSn nickel plated | |
| Gasket | | - | |
| Storage temperature range | | -40 – 90 °C | |
| Operation temperature range | | -25 – 85 °C | |
| Weight (kg/piece) | 0.0400 | | 0.0420 |
| Approvals | | - | |

Mounting diagram



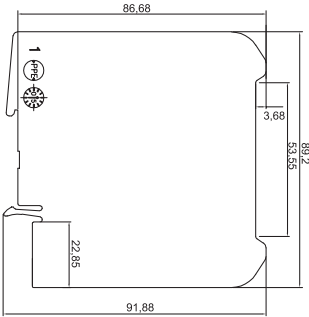
Accessories - Miscellaneous

Isolation plate for micro compact enclosure Colour: black



| Description | Part-No. | Type | PU | |
|--|-------------------------------|---------------|-----------|----|
| Colour | black, RAL 9001 | 760809 | TP 7-0809 | 10 |
| General | | 760809 | | |
| Housing material | Luranyl KR 2456-3 | | | |
| Colour | black, RAL 9001 | | | |
| Class of flammability according to UL 94 | V0 | | | |
| Surface | - | | | |
| Termination | attachable to TS 35 (EN50022) | | | |
| Storage temperature range | -40 – 80 °C | | | |
| Operation temperature range | -40 – 80 °C | | | |
| Dimensions (w x h x d) | 2.0 x 89.2 x 91.8 mm | | | |
| Weight (kg/piece) | 0.0050 | | | |
| Wire | - | | | |

Dimensions

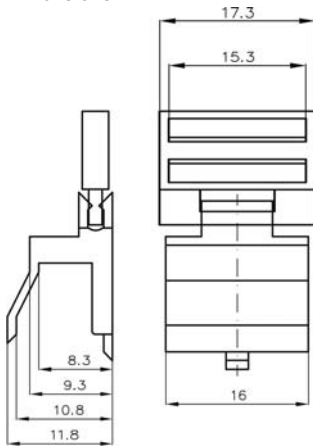


Accessories - Miscellaneous

Identification unit for Varioprint Colour: transparent



Dimensions



| Description | Part-No. | Type | PU |
|--|-------------|-----------------------|---------------------|
| Colour | transparent | 710799 | Bezeichnungseinheit |
| General | | 710799 | |
| Housing material | | Makrolon | |
| Colour | | transparent | |
| Class of flammability according to UL 94 | | V2 | |
| Surface | | smooth | |
| Termination | | Varioprint | |
| Storage temperature range | | -20 – 60 °C | |
| Operation temperature range | | -40 – 80 °C | |
| Dimensions (w x h x d) | | 17.3 x 31.0 x 11.8 mm | |
| Weight (kg/piece) | | 0.0030 | |
| Wire | | - | |

Article number index

| Part-No. | Page | Part-No. | Page | Part-No. | Page | Part-No. | Page | Part-No. | Page | Part-No. | Page |
|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|
| 400050 | 6.10 | 428015 | 6.53 | 445020 | 6.62 | 457520 | 6.60 | 462020 | 6.40 | 475510 | 6.24 |
| 400100 | 6.10 | 428020 | 6.53 | 447020 | 6.25 | 457550 | 6.60 | 462050 | 6.40 | 475515 | 6.24 |
| 402050 | 6.10 | 428050 | 6.53 | 447050 | 6.25 | 457603 | 6.46 | 462100 | 6.40 | 475520 | 6.24 |
| 402100 | 6.10 | 429003 | 6.53 | 447100 | 6.25 | 457606 | 6.46 | 463002 | 6.19 | 475550 | 6.24 |
| 407050 | 6.11 | 429006 | 6.53 | 456002 | 6.34 | 457610 | 6.46 | 463005 | 6.19 | 475702 | 6.14 |
| 407100 | 6.11 | 429010 | 6.53 | 456005 | 6.34 | 457615 | 6.46 | 463010 | 6.19 | 475705 | 6.14 |
| 409050 | 6.11 | 429015 | 6.53 | 456010 | 6.34 | 457620 | 6.46 | 463102 | 6.20 | 475710 | 6.14 |
| 409100 | 6.11 | 429020 | 6.53 | 456102 | 6.34 | 457650 | 6.46 | 463105 | 6.20 | 475802 | 6.15 |
| 410003 | 6.45 | 429050 | 6.53 | 456105 | 6.34 | 457703 | 6.46 | 463110 | 6.20 | 475805 | 6.15 |
| 410006 | 6.45 | 430003 | 6.61 | 456110 | 6.34 | 457706 | 6.46 | 463203 | 6.21 | 475810 | 6.15 |
| 410010 | 6.45 | 430006 | 6.61 | 456202 | 6.35 | 457710 | 6.46 | 463206 | 6.21 | 475903 | 6.16 |
| 410015 | 6.45 | 430010 | 6.61 | 456205 | 6.35 | 457715 | 6.46 | 463210 | 6.21 | 475905 | 6.16 |
| 410020 | 6.45 | 430015 | 6.61 | 456210 | 6.35 | 457720 | 6.46 | 463215 | 6.21 | 475906 | 6.16 |
| 410050 | 6.45 | 430020 | 6.61 | 456302 | 6.38 | 457750 | 6.46 | 463220 | 6.21 | 475907 | 6.16 |
| 411003 | 6.47 | 430050 | 6.61 | 456305 | 6.38 | 457803 | 6.48 | 463250 | 6.21 | 475908 | 6.16 |
| 411006 | 6.47 | 431003 | 6.61 | 456310 | 6.38 | 457806 | 6.48 | 464020 | 6.40 | 475910 | 6.16 |
| 411010 | 6.47 | 431006 | 6.61 | 456402 | 6.38 | 457810 | 6.48 | 464050 | 6.40 | 475915 | 6.16 |
| 411015 | 6.47 | 431010 | 6.61 | 456405 | 6.38 | 457815 | 6.48 | 464100 | 6.40 | 475920 | 6.16 |
| 411020 | 6.47 | 431015 | 6.61 | 456410 | 6.38 | 457820 | 6.48 | 465020 | 6.36 | 475930 | 6.16 |
| 411050 | 6.47 | 431020 | 6.61 | 456502 | 6.39 | 457850 | 6.48 | 465050 | 6.36 | 475950 | 6.16 |
| 415020 | 6.27 | 431050 | 6.61 | 456505 | 6.39 | 457903 | 6.48 | 465100 | 6.36 | 476020 | 6.31 |
| 415050 | 6.27 | 435003 | 6.62 | 456510 | 6.39 | 457906 | 6.48 | 466020 | 6.36 | 476050 | 6.31 |
| 415100 | 6.27 | 435006 | 6.62 | 456602 | 6.42 | 457910 | 6.48 | 466050 | 6.36 | 476100 | 6.31 |
| 416020 | 6.29 | 435010 | 6.62 | 456605 | 6.42 | 457915 | 6.48 | 466100 | 6.36 | 477020 | 6.37 |
| 416050 | 6.29 | 435015 | 6.62 | 456610 | 6.42 | 457920 | 6.48 | 467003 | 6.57 | 477050 | 6.37 |
| 416100 | 6.29 | 435020 | 6.62 | 456702 | 6.42 | 457950 | 6.48 | 467006 | 6.57 | 477100 | 6.37 |
| 418003 | 6.57 | 436003 | 6.63 | 456705 | 6.42 | 458102 | 6.26 | 467010 | 6.57 | 478020 | 6.37 |
| 418006 | 6.57 | 436006 | 6.63 | 456710 | 6.42 | 458105 | 6.26 | 467015 | 6.57 | 478050 | 6.37 |
| 418010 | 6.57 | 436010 | 6.63 | 456802 | 6.43 | 458110 | 6.26 | 467020 | 6.57 | 478100 | 6.37 |
| 418015 | 6.57 | 436015 | 6.63 | 456805 | 6.43 | 458202 | 6.26 | 467050 | 6.57 | 479020 | 6.41 |
| 418020 | 6.57 | 436020 | 6.63 | 456810 | 6.43 | 458205 | 6.26 | 468020 | 6.44 | 479050 | 6.41 |
| 418050 | 6.57 | 438003 | 6.64 | 457003 | 6.55 | 458210 | 6.26 | 468050 | 6.44 | 479100 | 6.41 |
| 420003 | 6.54 | 438006 | 6.64 | 457006 | 6.55 | 458302 | 6.28 | 468100 | 6.44 | 481020 | 6.27 |
| 420006 | 6.54 | 438010 | 6.64 | 457010 | 6.55 | 458305 | 6.28 | 469020 | 6.44 | 481050 | 6.27 |
| 420010 | 6.54 | 438015 | 6.64 | 457015 | 6.55 | 458310 | 6.28 | 469050 | 6.44 | 481100 | 6.27 |
| 420015 | 6.54 | 438020 | 6.64 | 457020 | 6.55 | 458402 | 6.28 | 469100 | 6.44 | 482020 | 6.33 |
| 420020 | 6.54 | 439003 | 6.63 | 457050 | 6.55 | 458405 | 6.28 | 471020 | 6.32 | 482050 | 6.33 |
| 420050 | 6.54 | 439006 | 6.63 | 457103 | 6.55 | 458410 | 6.28 | 471050 | 6.32 | 482100 | 6.33 |
| 422003 | 6.50 | 439010 | 6.63 | 457106 | 6.55 | 458502 | 6.30 | 471100 | 6.32 | 486020 | 6.25 |
| 422006 | 6.50 | 439015 | 6.63 | 457110 | 6.55 | 458505 | 6.30 | 472020 | 6.32 | 486050 | 6.25 |
| 422010 | 6.50 | 439020 | 6.63 | 457115 | 6.55 | 458510 | 6.30 | 472050 | 6.32 | 486100 | 6.25 |
| 422015 | 6.50 | 440003 | 6.58 | 457120 | 6.55 | 458602 | 6.30 | 472100 | 6.32 | 487003 | 6.45 |
| 422020 | 6.50 | 440006 | 6.58 | 457150 | 6.55 | 458605 | 6.30 | 473020 | 6.33 | 487006 | 6.45 |
| 422050 | 6.50 | 440010 | 6.58 | 457203 | 6.56 | 458610 | 6.30 | 473050 | 6.33 | 487010 | 6.45 |
| 424003 | 6.58 | 440015 | 6.58 | 457206 | 6.56 | 458702 | 6.35 | 473100 | 6.33 | 487015 | 6.45 |
| 424006 | 6.58 | 440020 | 6.58 | 457210 | 6.56 | 458705 | 6.35 | 474020 | 6.29 | 487020 | 6.45 |
| 424010 | 6.58 | 440050 | 6.58 | 457215 | 6.56 | 458710 | 6.35 | 474050 | 6.29 | 487050 | 6.45 |
| 424015 | 6.58 | 441003 | 6.64 | 457220 | 6.56 | 458802 | 6.39 | 474100 | 6.29 | 488003 | 6.47 |
| 424020 | 6.58 | 441006 | 6.64 | 457250 | 6.56 | 458805 | 6.39 | 475002 | 6.17 | 488006 | 6.47 |
| 424050 | 6.58 | 441010 | 6.64 | 457303 | 6.59 | 458810 | 6.39 | 475005 | 6.17 | 488010 | 6.47 |
| 426003 | 6.52 | 441015 | 6.64 | 457306 | 6.59 | 458902 | 6.43 | 475010 | 6.17 | 488015 | 6.47 |
| 426006 | 6.52 | 441020 | 6.64 | 457310 | 6.59 | 458905 | 6.43 | 475203 | 6.18 | 488020 | 6.47 |
| 426010 | 6.52 | 442003 | 6.54 | 457315 | 6.59 | 458910 | 6.43 | 475206 | 6.18 | 488050 | 6.47 |
| 426015 | 6.52 | 442006 | 6.54 | 457320 | 6.59 | 459103 | 6.56 | 475210 | 6.18 | 489003 | 6.49 |
| 426020 | 6.52 | 442010 | 6.54 | 457350 | 6.59 | 459106 | 6.56 | 475215 | 6.18 | 489006 | 6.49 |
| 426050 | 6.52 | 442015 | 6.54 | 457403 | 6.59 | 459110 | 6.56 | 475220 | 6.18 | 489010 | 6.49 |
| 427003 | 6.51 | 442020 | 6.54 | 457406 | 6.59 | 459115 | 6.56 | 475250 | 6.18 | 489015 | 6.49 |
| 427006 | 6.51 | 442050 | 6.54 | 457410 | 6.59 | 459120 | 6.56 | 475302 | 6.22 | 489020 | 6.49 |
| 427010 | 6.51 | 443020 | 6.41 | 457415 | 6.59 | 459150 | 6.56 | 475305 | 6.22 | 489050 | 6.49 |
| 427015 | 6.51 | 443050 | 6.41 | 457420 | 6.59 | 459203 | 6.60 | 475310 | 6.22 | 490010 | 6.68 |
| 427020 | 6.51 | 443100 | 6.41 | 457450 | 6.59 | 459206 | 6.60 | 475402 | 6.23 | 490011 | 6.68 |
| 427050 | 6.51 | 445003 | 6.62 | 457503 | 6.60 | 459210 | 6.60 | 475405 | 6.23 | 490012 | 6.68 |
| 428003 | 6.53 | 445006 | 6.62 | 457506 | 6.60 | 459215 | 6.60 | 475410 | 6.23 | 490013 | 6.69 |
| 428006 | 6.53 | 445010 | 6.62 | 457510 | 6.60 | 459220 | 6.60 | 475503 | 6.24 | 490014 | 6.69 |
| 428010 | 6.53 | 445015 | 6.62 | 457515 | 6.60 | 459250 | 6.60 | 475506 | 6.24 | 490015 | 6.69 |

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| 490016 | 6.67 | 493305 | 6.6 | 700774 | 4.43 | 706174 | 4.44 | 709663 | 4.27 | 709750 | 4.26 |
| 490017 | 6.67 | 493310 | 6.6 | 700857 | 4.41 | 706175 | 4.44 | 709664 | 4.27 | 709751 | 4.26 |
| 490018 | 6.67 | 493405 | 6.6 | 700861 | 4.40 | 706509 | 4.35 | 709666 | 4.27 | 709753 | 4.26 |
| 490019 | 6.69 | 493410 | 6.6 | 700862 | 4.40 | 707403 | 4.29 | 709667 | 4.27 | 709754 | 4.26 |
| 490020 | 6.69 | 493505 | 6.7 | 700863 | 4.40 | 707409 | 4.35 | 709668 | 4.27 | 709755 | 4.26 |
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| 490034 | 6.65 | 493710 | 6.7 | 700897 | 4.41 | 707518 | 4.38 | 709677 | 4.17 | 709761 | 4.28 |
| 490035 | 6.66 | 499988 | 7.16 | 700905 | 4.41 | 709519 | 4.14 | 709678 | 4.17 | 709762 | 4.28 |
| 490036 | 6.65 | 499989 | 7.17 | 700910 | 4.41 | 709526 | 4.16 | 709679 | 4.18 | 709763 | 4.28 |
| 490037 | 6.66 | 499991 | 6.78 | 700950 | 4.11 | 709527 | 4.16 | 709680 | 4.18 | 709764 | 4.28 |
| 490038 | 7.18 | 499992 | 6.78 | 700951 | 4.11 | 709600 | 4.14 | 709681 | 4.18 | 709766 | 4.28 |
| 490047 | 7.19 | 499993 | 7.16 | 700952 | 4.11 | 709601 | 4.14 | 709683 | 4.21 | 709767 | 4.28 |
| 490048 | 7.19 | 499994 | 7.17 | 700953 | 4.12 | 709602 | 4.14 | 709684 | 4.21 | 709768 | 4.28 |
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| 490054 | 6.71 | 700190 | 4.51 | 700958 | 4.13 | 709607 | 4.14 | 709690 | 4.32 | 709775 | 4.15 |
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| 490057 | 6.66 | 700192 | 4.51 | 700960 | 4.11 | 709610 | 4.17 | 709692 | 4.32 | 709777 | 4.19 |
| 490058 | 6.65 | 700217 | 4.50 | 700962 | 4.13 | 709611 | 4.17 | 709694 | 4.32 | 709778 | 4.19 |
| 490059 | 6.66 | 700321 | 4.10 | 701321 | 4.10 | 709612 | 4.17 | 709700 | 4.15 | 709779 | 4.20 |
| 490060 | 6.75 | 700322 | 4.10 | 701530 | 4.47 | 709613 | 4.17 | 709701 | 4.15 | 709780 | 4.20 |
| 490061 | 6.75 | 700323 | 4.10 | 701531 | 4.47 | 709614 | 4.17 | 709702 | 4.16 | 709781 | 4.20 |
| 490062 | 6.75 | 700324 | 4.10 | 701532 | 4.47 | 709615 | 4.17 | 709703 | 4.16 | 709782 | 4.31 |
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| 490065 | 6.74 | 700372 | 4.48 | 701535 | 4.47 | 709620 | 4.18 | 709706 | 4.16 | 709785 | 4.23 |
| 490066 | 6.74 | 700373 | 4.48 | 701583 | 4.7 | 709621 | 4.18 | 709707 | 4.16 | 709786 | 4.24 |
| 490067 | 6.74 | 700374 | 4.48 | 702341 | 4.8 | 709622 | 4.18 | 709708 | 4.15 | 709787 | 4.24 |
| 490068 | 6.74 | 700375 | 4.48 | 702344 | 4.8 | 709623 | 4.18 | 709710 | 4.19 | 709788 | 4.24 |
| 490069 | 6.74 | 700379 | 4.48 | 702401 | 4.8 | 709624 | 4.18 | 709711 | 4.19 | 709789 | 4.31 |
| 490070 | 6.67 | 700409 | 7.14 | 702466 | 4.8 | 709625 | 4.18 | 709712 | 4.19 | 709790 | 4.33 |
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| 490077 | 6.71 | 700440 | 4.5 | 705241 | 4.42 | 709634 | 4.21 | 709721 | 4.20 | 710626 | 5.3 |
| 490078 | 6.78 | 700445 | 4.5 | 705341 | 4.42 | 709635 | 4.21 | 709722 | 4.20 | 710663 | 5.3 |
| 490079 | 6.78 | 700446 | 4.5 | 705371 | 4.42 | 709636 | 4.21 | 709723 | 4.20 | 710664 | 5.3 |
| 490080 | 6.78 | 700462 | 4.7 | 705441 | 4.42 | 709637 | 4.21 | 709724 | 4.20 | 710665 | 5.5 |
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| 490082 | 6.77 | 700464 | 4.7 | 705503 | 4.36 | 709641 | 4.22 | 709726 | 4.20 | 710711 | 1.101 |
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| 490085 | 6.77 | 700476 | 4.6 | 705507 | 4.29 | 709644 | 4.22 | 709731 | 4.23 | 710724 | 1.102 |
| 490086 | 6.76 | 700480 | 4.52 | 705509 | 4.35 | 709645 | 4.22 | 709732 | 4.23 | 710728 | 1.102 |
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| 491005 | 6.13 | 700491 | 4.53 | 705709 | 4.39 | 709653 | 4.25 | 709737 | 4.23 | 710763 | 1.99 |
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| 493105 | 6.5 | 700529 | 4.54 | 706170 | 4.44 | 709659 | 4.25 | 709744 | 4.24 | 710802 | 5.5 |
| 493110 | 6.5 | 700568 | 4.6 | 706171 | 4.44 | 709660 | 4.27 | 709745 | 4.24 | 710804 | 5.5 |
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| 770306 | 7.5 | 770531 | 7.4 | | | | | | | | |
| 770310 | 7.5 | 770536 | 7.4 | | | | | | | | |
| 770311 | 7.5 | 770537 | 7.4 | | | | | | | | |
| 770316 | 7.5 | 770540 | 1.93 | | | | | | | | |
| 770317 | 7.5 | 770541 | 1.93 | | | | | | | | |
| 770320 | 7.5 | 770546 | 1.93 | | | | | | | | |
| 770321 | 7.5 | 770550 | 1.94 | | | | | | | | |
| 770326 | 7.5 | 770551 | 1.94 | | | | | | | | |
| 770330 | 7.5 | 770556 | 1.94 | | | | | | | | |

Certificates



CERTIFICATE

DQS GmbH
Deutsche Gesellschaft zur Zertifizierung von Managementsystemen
hereby certifies that the company

Friedrich Lütze GmbH & Co. KG
Bruckwiesenstrasse 17-19
D-71384 Weinstadt

with the organizational units/sites as listed in the annex
for the scope
Development, production and distribution of electrical and electronic components and solutions for the automation technology

has implemented and maintains a
Quality Management System.

An audit, documented in a report, has verified that this quality management system fulfills the requirements of the following standard:

DIN EN ISO 9001 : 2000
December 2000 edition

| | |
|---------------------------------|------------|
| This certificate is valid until | 2010-07-04 |
| Certificate Registration No. | 001737 QM |
| Frankfurt am Main | 2007-07-05 |

 Ass. iur. M. Drechsel
  Dipl.-Ing. S. Henioth
 MANAGING DIRECTORS




D-60433 Frankfurt am Main, August-Schanz-Straße 21



CERTIFICATE

DQS GmbH
Deutsche Gesellschaft zur Zertifizierung von Managementsystemen
hereby certifies that the company

Friedrich Lütze GmbH & Co. KG
Bruckwiesenstrasse 17-19
D-71384 Weinstadt

for the scope
Development, production and distribution of electrical and electronic components and solutions for the automation technology

has implemented and maintains an
Environmental Management System.

An audit, documented in a report, has verified that this environmental management system fulfills the requirements of the following standard:

EN ISO 14001 : 2004
November 2004 edition

| | |
|---------------------------------|------------|
| This certificate is valid until | 2010-07-04 |
| Certificate Registration No. | 001737 UM |
| Frankfurt am Main | 2007-07-05 |

 Ass. iur. M. Drechsel
  Dipl.-Ing. S. Henioth
 MANAGING DIRECTORS




D-60433 Frankfurt am Main, August-Schanz-Straße 21



CERTIFICATE

DQS GmbH
Deutsche Gesellschaft zur Zertifizierung von Managementsystemen
hereby certifies that the company

Friedrich Lütze GmbH & Co. KG
Bruckwiesenstrasse 17-19
D-71384 Weinstadt

for the product categories
**On board vehicle control (IRIS Scope 9)
Cabling and cabinets (IRIS Scope 12)**

for the scope
Development, production and marketing of components and systems for rail vehicles

confirms, as an IRIS approved certification body, that the Management System of the above organization has been assessed and found to be in accordance with the

**International Railway Industry Standard (IRIS)
Revision 00, March 2006**

| | |
|--------------------------------------|-------------------------|
| Certification audit | 2007-05-15 – 2007-05-23 |
| Certification decision | 2007-07-05 |
| This certificate is valid until | 2010-07-04 |
| Certificate Registration No. | 001737 IRIS |
| Issued in Frankfurt am Main, Germany | 2007-07-05 |

 Ass. iur. M. Drechsel
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