

реле **CONTA-ELECTRONICS**, Минск т.80447584780

www.fotorele.net www.tiristor.by радиодетали, электронные компоненты

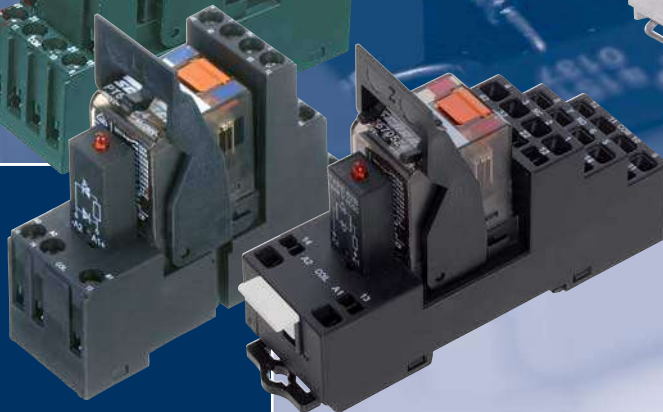
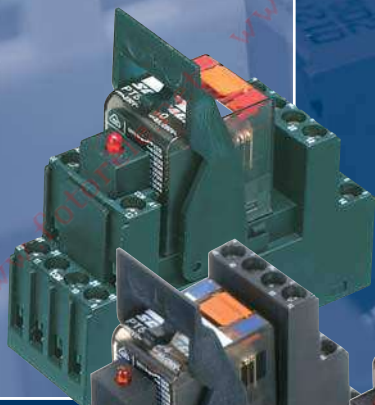
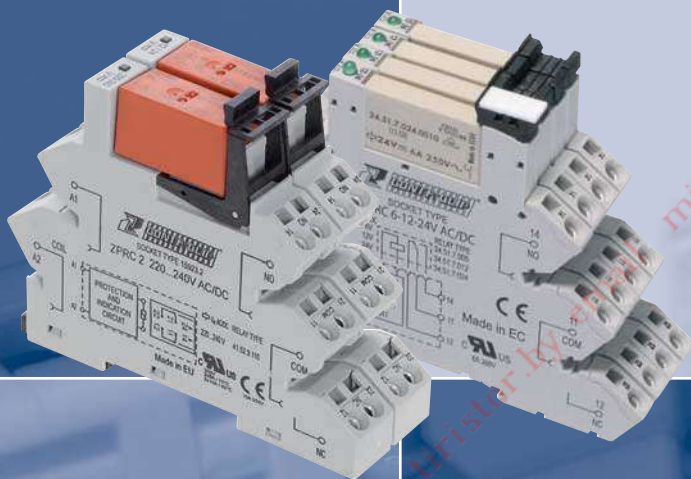
email minsk17@tut.by tel.+375 29 758 47 80 мтс

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| <p>РАДИОДЕТАЛИ ЭЛЕКТРОННЫЕ КОМПОНЕНТЫ</p> <p>Беларусь Минск</p> <p>www.fotorele.net www.tiristor.by email minsk17@tut.by тел.+375447584780</p> | <p>QR код</p>  |
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| <p>RELAYS</p>  <p>CONTA CLIP</p> <p>CONTA ELECTRONICS</p> | <p>РАДИОДЕТАЛИ ЭЛЕКТРОННЫЕ КОМПОНЕНТЫ</p> <p>Беларусь Минск</p> <p>www.fotorele.net www.tiristor.by email minsk17@tut.by тел.+375447584780</p> <p>аналог, замена</p> <p>QR код</p>  | <p>contaclip, conta electronics реле колодка розетка</p> <p>каталог, описание, технические, характеристики, datasheet, параметры, маркировка, габариты, фото, даташит, спецификация, сайт, Беларусь, Минск, продажа, купить, аналог, замена</p> |
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CONTA ELECTRONICS RELAYS



Relay

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CONTA-CLIP

The Company

Founded and kept in the family since 1977: **CONTA-CLIP** is an owner-operated company that is a mid-sized global player. Users of electrical and electronic connection products have come to trust us for our reliable components. They also trust in our wide-reaching competence within the market and industry which has evolved over many years. In the years since our company was founded, we have evolved from a manufacturer to an innovator.

Our employees are connectivity specialists coming from a wide variety of backgrounds. They understand the specific problems, requirements and challenges of our customers. This ensures communication among equals. We then invest our gains directly into maintaining a modern and efficient production process. This allows us to maintain the most modern machinery at our facilities. We develop and produce the tooling ourselves. We neither make nor accept any compromise in the quality of materials used in our products.

Our top-class products are supported by this interplay between top-class men and machinery. We have also designed our range of services to align with customer needs. We develop electronics, assemble terminal rails, take care of component labelling, and deliver completely populated housings when needed – totally customized and expedited.

Our passion and concern for our customers' challenges does not end after we've delivered our solution. **CONTA-CLIP** customer representatives are always ready to offer their support to the customer, because service and support are our top priorities.

You can find out all about product innovations, trade fair appointments, press releases, and more at our official **CONTA-CLIP** web site.

If you want to make sure you do not miss any news, subscribe with no obligation to our **CONTA-CLIP** newsletter by e-mail.

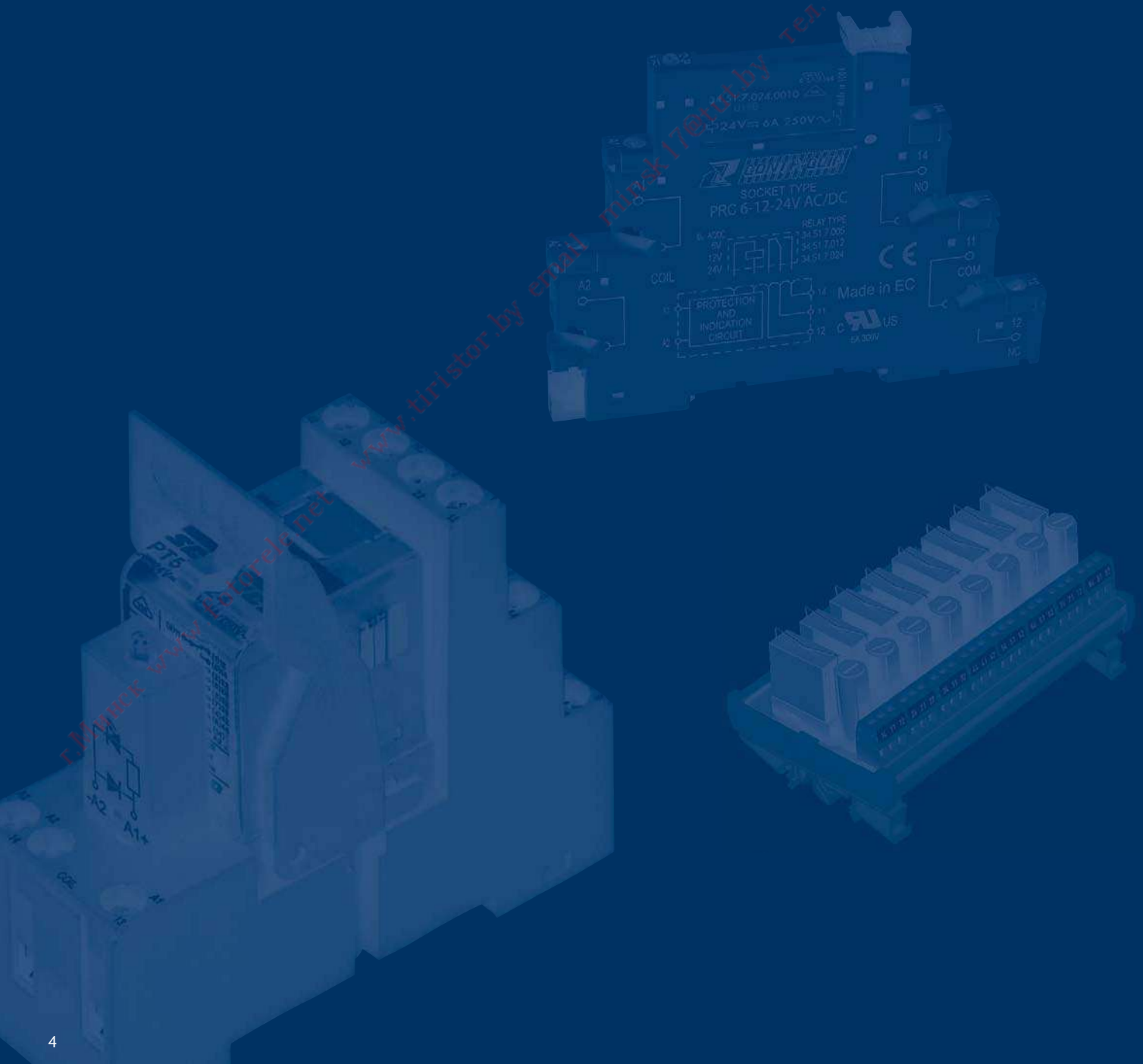
www.conta-clip.com



Relay Systems

Relay technology continues to play a large role in the reliability of industrial control and automation solutions. Because of their thin design, relay couplers find use in rail-oriented control designs. Thanks to their features, **CONTA-CLIP** relay couplers are well-suited for use in secure electrical isolation of circuits or for the multiplication of contacts.

Whether it is in manufacturing, electrical machine and plant instrumentation, control engineering, building automation, or process engineering – everywhere it is important to guarantee that the signal exchange between the peripheral devices and the upper-level central control and instrumentation systems remains potential-free and operationally safe.

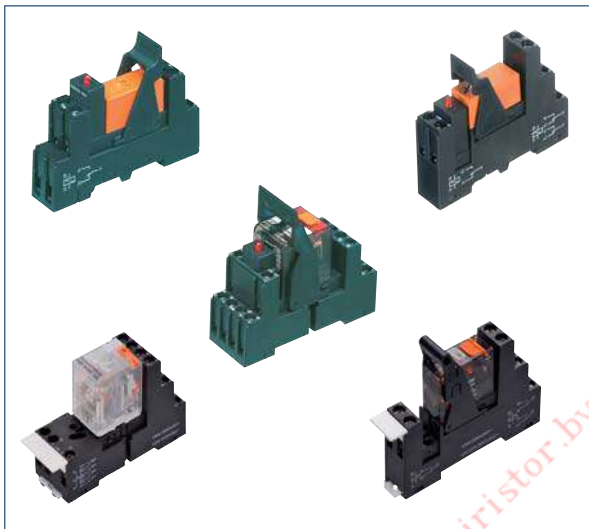


Relay Systems



Compact plug relays PRC

PRC relay couplers distinguish themselves by their compact shape in the terminal block design. With a width of just 6.2 mm for a 1 CO relay and 14 mm for a relay with 2 COs, there are many application possibilities. The basis relay offers 28 versions, including screw and tension-spring connections, and available coil voltages from 6 to 24 VDC and from 12 to 240 VAC/DC. With the **AQI** cross-connection system, mutual potentials can be carried out over the coil or contact sides. For excellent equipment identification, the socket base has a labelling surface for the standard **PMC** marking system. **CONTA-CLIP** also offers a customer-specific labelling service, in addition to the standard marking.



Plug relay system PRS

PRS relay couplers are available in one-, two- and four-change-over design. The relay plug-in modules are designed for a measured voltage from 300 V. They can be combined with relays (in the coil-voltage range of 12 to 220 VDC and 12 to 230 VAC) and the appropriate insert-modules or status displays. In order to guarantee that the relay is mechanically snug in the frame, a relay holding-clamp can be mounted. The switchable continuous current is 12 amps for the one- and two-CO versions, and 6 amps for the four-CO versions. The **PRS...G** types have electrical contacts which are designed so that the coil side and the contact side are arranged separately from another. The relay frame, relay insert module and holding-clamp can be modularly assembled and combined.



RM/HA/24 VUC | AUTO-ON-OFF-relay

This compact relay component acts as the interface between the encoder, input, control signals and the control or factory-level. It also enables simple switching from automatic mode to OFF or manual mode. Because of the coil construction for the 24 V AC/DC input, the component has a wide variety of uses. A potential-free check-back contact for control allows for convenient monitoring of the operating status. The status is also shown with an integrated LED. The integrated relay is designed with a switching capacity of up to 2500 VA at a rated voltage of 250 V.

Compact plug relays PRC

Relay terminals with 1-CO relay

1. Overview

a Labelling | Marking
The socket bases have a labelling surface which is optimally suited for our **PMC Pocket-Maxicard (PMC BSTR 6/30)** standard marking systems. In addition to our large variety of standard labels, **CONTA-CLIP** can also provide "just-in-time" individual labelling for you.



b Using the mount/dismount lever
The mounting and dismounting mechanism forms a reliable connection by latching the relay with the socket base. The fitted relay can be removed, easily and without force, from the socket base by using the dismount function of the lever!

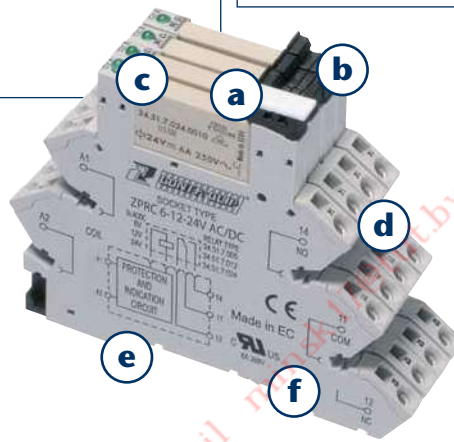


d Pluggable external cross-connections

The AQI/PRC pluggable cross-connection system enables a time-saving distribution of potentials. The AQI/PRC is constructed so that it is protected against accidental touch. It is available as a 20-pole unit, in either yellow, blue or black. The cross-connector can be shortened to fewer poles in order to fit the required interface. Insulation plating can be used to insulate the ends.

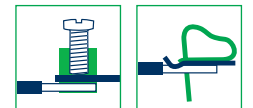


c Pluggable relays
Pluggable relays are also available with AgSNO and gold contacts, to fit with the many functions of your individual requirements!



e Mounts on standard TS 35 rail
CONTA-CLIP relay terminal can be flexibly mounted on standard TS 35 mounting rails according to EN 50035 and EN 50022.

f Connection types
All of our relay terminals are optionally available with screw or tension-spring connection systems.



2. Approvals (Details upon request.)

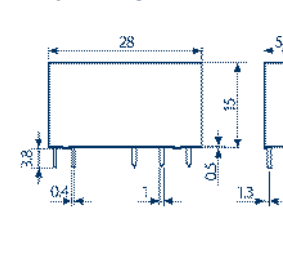


3. Features

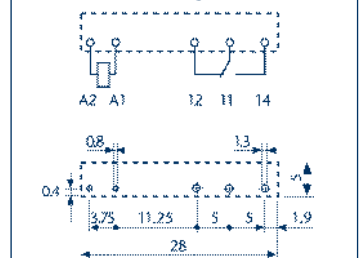
1. Relay

- 5 mm width, extremely narrow monitoring relay
- Sensitive DC coil, 170 mW
- Secure isolation between the coil and the contacts, according to VDE 0160/EN 50178
- 6 mm clearance distance, 8 mm creepage distance
- 6 kV (1.2/50 μs)
- Protection class II, according to VDE 0631/EN 60730

Relay - complete view



Connection diagram

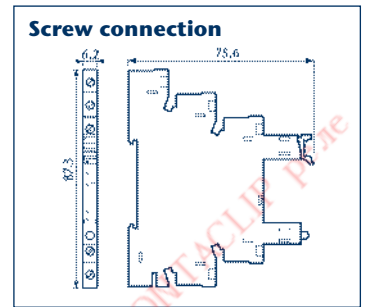
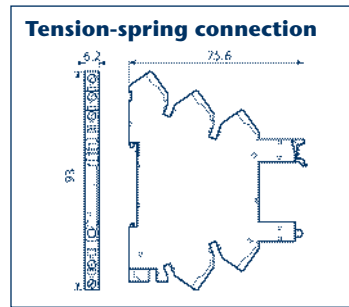


Compact plug relays PRC

Relay terminals with 1-CO relay

II. Socket base

- Mount on TS 35
- Very flexible and modular construction of individual relay bases
- User-friendly, because the relays can be easily replaced
- High-quality connecting terminals (tension-spring or screw connection system)
- Integrated EMC coil circuitry, and LED
- High-quality innovative mount/dismount lever
- All versions are optionally available with screw or tension-spring connection system



4. Specifications

Electro-mechanical relay

Insulation properties

| | | |
|---|-------------------------------|-----|
| Insulation coordination, according to EN 61810-1, VDE 0435 T 201. | Rated insulation voltage of V | 250 |
| | Rated surge voltage kV | 4 |
| | Pollution degree | 3 |
| | Overvoltage category | III |

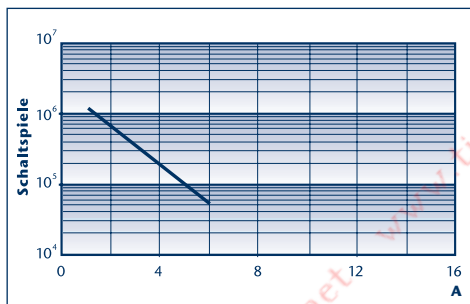
EMC - interference immunity of the control circuit (coil)

| | | |
|---|--------------|----------------|
| BURST (5... 50) ns, 5 kHz, on A 1-A 2 | EN 61000-4-4 | class 4 (4 kV) |
| SURGE (1.2/50) μ s on A 1-A 2 (differential mode) | EN 61000-4-5 | class 3 (2 kV) |

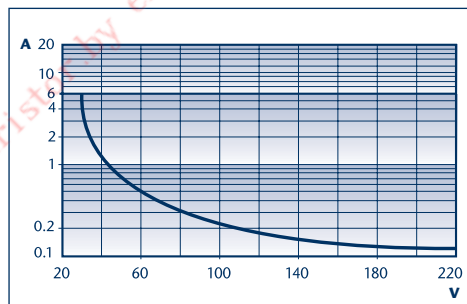
Additional data

| | | |
|--|---------------------------|--------------------------|
| Bounce time by closure of the NO/NC | ms | 1/6 |
| Resistance to vibration (10... 55 Hz, max \pm 1 mm): | | |
| | NO/NC g/g | 10/5 flux density |
| Ambient heat dissipation | without contact current W | 0.2 (12 V) - 0.9 (240 V) |
| | by continuous current W | 0.5 (12 V) - 1.5 (240 V) |

5. Contact data



Service life of contact under AC 1 load



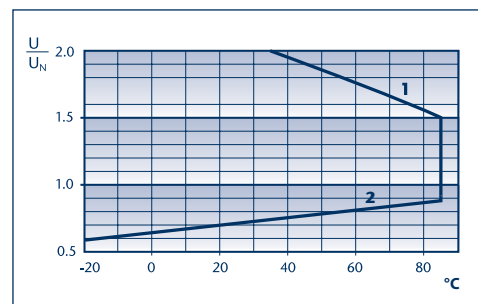
Switching capacity under DC 1 load

- Under resistive load (DC 1) and with an intersection of current and voltage that lies under the curve: this is an indication of an electrical life span greater to or equal to 100,000 switching cycles.
- Under an inductive load (DC 13), a free-wheel diode must be switched parallel to the load. Note: the return time is increased.

6. Coil data

DC version

| Rated voltage | Operating Range | | Resistance | Rated current |
|---------------|-----------------|----------------|------------|---------------|
| | U_N V | U_{min} V | | |
| 5 | 3.5 | 7.5 | 130 | 38.4 |
| 12 | 8.4 | 18 | 840 | 14.2 |
| 24 | 16.8 | 36 | 3.350 | 7.1 |
| 48 | 33.6 | 72 | 12.300 | 3.9 |
| 60 | 42 | 90 | 19.700 | 3 |



Reliable range of operating voltage

- 1 Max. permitted coil voltage
- 2 Response voltage, when coil temperature equal to ambient temperature

Compact plug relays PRC

Screw-connection relay terminals

- Consisting of: basic terminal and pluggable relay.
- Mount on TS 35

Connection diagram

- Internal EMC coil circuitry and LED display
- LW versions: an internal AC residual-current suppression and LED display

PRCU 1/6V DC



PRCU 1/12V DC



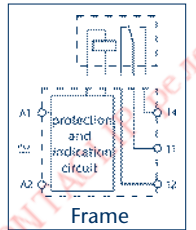
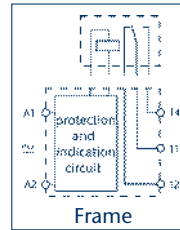
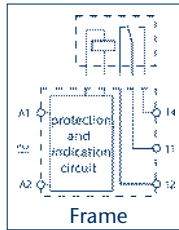
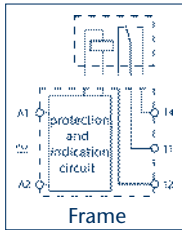
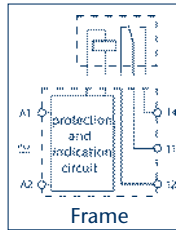
PRCU 1/24V DC



PRCU 1/12V AC/DC



PRCU 1/24V AC/DC



| Type | PRCU 1/6 V DC | PRCU 1/12 V DC | PRCU 1/24 V DC | PRCU 1/12 V AC/DC | PRCU 1/24 V AC/DC |
|--|--|--|--|---|---|
| Cat. no./Qty. Type/Colour grey (RAL 7032) | 15513.2/10 | 15514.2/10 | 15515.2/10 | 15569.2/10 | 15508.2/10 |
| Size (L x W x H) with TS 35 x 7.5 | 87.3 x 6.2 x 79.9 mm | 87.3 x 6.2 x 79.9 mm | 87.3 x 6.2 x 79.9 mm | 87.3 x 6.2 x 79.9 mm | 87.3 x 6.2 x 79.9 mm |
| Weight | 36 g | 36 g | 36 g | 36 g | 36 g |
| Rated operating voltage | 6 V DC | 12 V DC | 24 V DC | 2 V AC/DC | 24 V AC/DC |
| General information | | | | | |
| Mech. life span AC/DC switching cycles | -/10 x 10 ⁶ | -/10 x 10 ⁶ | -/10 x 10 ⁶ | 10 x 10 ⁶ /10 x 10 ⁶ | 10 x 10 ⁶ /10 x 10 ⁶ |
| Electrical life span AC 1 switching cycles | 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ |
| Response time/release time | 5/6 ms | 5/6 ms | 5/6 ms | 5/6 ms | 5/6 ms |
| Insulation coordination, EN 61810-5 | 4 kV/3 | 4 kV/3 | 4 kV/3 | 4 kV/3 | 4 kV/3 |
| Dielectric strength coil/contacts (1.2/50 μs) | 6 kV | 6 kV | 6 kV | 6 kV | 6 kV |
| Dielectric strength of open contacts | 1,000 V AC | 1,000 V AC | 1,000 V AC | 1,000 V AC | 1,000 V AC |
| Ambient temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C |
| Relay protection type | RT II | RT II | RT II | RT II | RT II |
| Ratings for socket base | | | | | |
| Ambient temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C |
| Insulation stripping length | 10 mm | 10 mm | 10 mm | 10 mm | 10 mm |
| Max. connection cross-section, solid flexible | 1x2.5 1x2.5 mm ² 1x14 1x14 AWG | 1x2.5 1x2.5 mm ² 1x14 1x14 AWG | 1x2.5 1x2.5 mm ² 1x14 1x14 AWG | 1x2.5 1x2.5 mm ² 1x14 1x14 AWG | 1x2.5 1x2.5 mm ² 1x14 1x14 AWG |
| Ratings for plug-relays combined with socket base | | | | | |
| Contacts | | | | | |
| Number of contacts | 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact |
| Max. continuous current Max. inrush current | 6/10 A | 6/10 A | 6/10 A | 6/10 A | 6/10 A |
| Rated voltage Max. switching voltage | 250/400 VAC* | 250/400 VAC* | 250/400 VAC* | 250/400 VAC* | 250/400 VAC* |
| Max. power rating AC 1 | 1,500 VA | 1,500 VA | 1,500 VA | 1,500 VA | 1,500 VA |
| Max. power rating AC 15 (230 V AC) | 300 VA | 300 VA | 300 VA | 300 VA | 300 VA |
| 1-phase motor load, AC 3 operation (230 V AC) | 0.185 kw | 0.185 kw | 0.185 kw | 0.185 kw | 0.185 kw |
| Max. switching current DC 1:30/110/220 V | 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A |
| Min. switching load | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) |
| Standard contact material | AqNi | AqNi | AqNi | AqNi | AqNi |
| Coil | | | | | |
| Rated voltage (U _N) | 5 V DC - AC | 12 V DC - AC | 24 V DC - AC | 12 V DC 12 AC | 24 V DC 24 AC |
| Power rating AC/DC | 0.2 W | 0.2 W | 0.2 W | 0.2 W | 0.2 W |
| Operating range | - | - | - | (0.8 to 1.1) U _N AC (50/60 Hz) (0.8 to 1.2) U _N DC | (0.8 to 1.1) U _N AC (50/60 Hz) (0.8 to 1.2) U _N DC |
| Holding current | 0.6 U _N DC | 0.6 U _N DC | 0.6 U _N DC | 0.6 U _N AC/0.6 U _N DC | 0.6 U _N AC/0.6 U _N DC |
| Drop-out voltage | 0.05 U _N DC | 0.05 U _N DC | 0.05 U _N DC | 0.1 U _N AC/0.05 U _N DC | 0.1 U _N AC/0.05 U _N DC |

Individual components, socket base

| Type/Colour grey (RAL 7032) | PRC 6-12-24V DC | PRC 6-12-24V DC | PRC 6-12-24V DC | PRC 6-12-24V AC/DC | PRC 6-12-24V AC/DC |
|-----------------------------|-------------------|-------------------|-------------------|--------------------|--------------------|
| Cat. no./Qty. | 15490.2/10 | 15490.2/10 | 15490.2/10 | 15488.2/10 | 15488.2/10 |

Individual components, plug relays

| Type/Rated voltage | PRC 1/5V DC | PRC 1/12V DC | PRC 1/24V DC | PRC 1/12V DC | PRC 1/24V DC |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Cat. no./Qty. | 15500.2/10*3 | 15501.2/10*3 | 15502.2/10*3 | 15501.2/10*3 | 15502.2/10*3 |

| Accessories AOI/PRC external insulated cross-connector | AOI/PRC/20 | AOI/PRC/20 | AOI/PRC/20 | AOI/PRC/20 | AOI/PRC/20 |
|--|------------------|------------------|------------------|------------------|------------------|
| Cat. no./Qty. yellow | 15545.8/1 | 15545.8/1 | 15545.8/1 | 15545.8/1 | 15545.8/1 |
| Cat. no./Qty. blue | 15545.5/1 | 15545.5/1 | 15545.5/1 | 15545.5/1 | 15545.5/1 |
| Cat. no./Qty. black | 15545.4/1 | 15545.4/1 | 15545.4/1 | 15545.4/1 | 15545.4/1 |

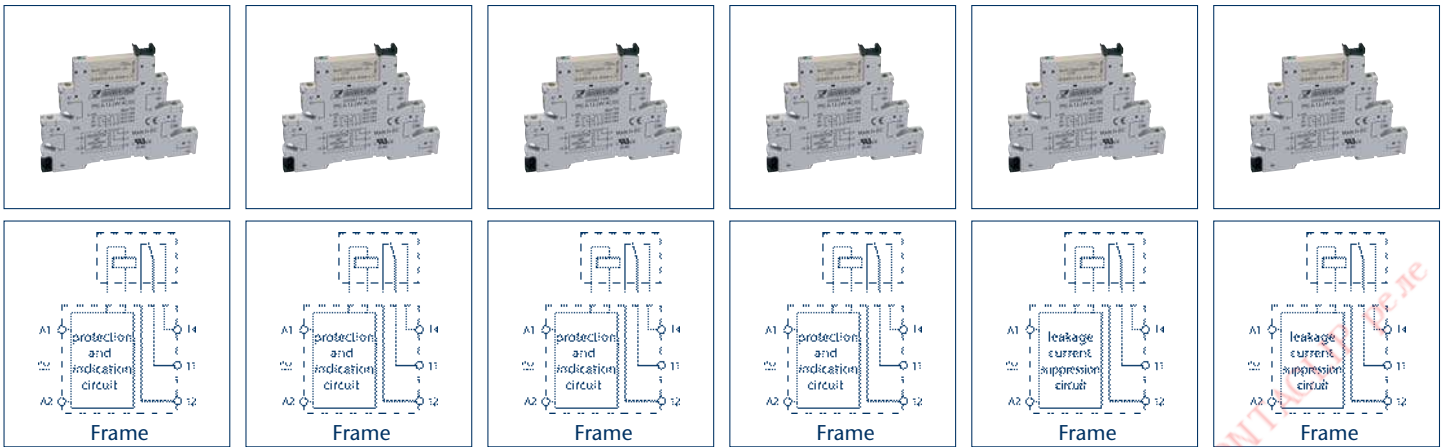
| TW/PRC partitions | TW/PRC | TW/PRC | TW/PRC | TW/PRC | TW/PRC |
|----------------------|------------------|------------------|------------------|------------------|------------------|
| Cat. no./Qty. | 15546.2/1 | 15546.2/1 | 15546.2/1 | 15546.2/1 | 15546.2/1 |

| PMC labelling/markers | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
| Cat. no./Qty., standard print, see catalog | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT |
| Cat. no./Qty. neutral | 9106.7/300 | 9106.7/300 | 9106.7/300 | 9106.7/300 | 9106.7/300 |
| Cat. no./Qty., special print | 9107.7/300 | 9107.7/300 | 9107.7/300 | 9107.7/300 | 9107.7/300 |

| SDB screwdriver | SDB 0.6 x 3.5 | SDB 0.6 x 3.5 | SDB 0.6 x 3.5 | SDB 0.6 x 3.5 | SDB 0.6 x 3.5 |
|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Cat. no./Qty. | 1086.0/1 | 1086.0/1 | 1086.0/1 | 1086.0/1 | 1086.0/1 |

* The conditions of pollution degree 2 are fulfilled at 400 V.
 *1 In order for the relay to de-energise, the residual current can be suppressed/controlled via the SPS-230 V semiconductor outputs, longe control lines (LW), thyristors, and inductive proximity switch!
 *2 Since this relay is only produced for DC at a max. 60 V, the adjustment to the operating voltage occurs via the internal resistance and bridge rectifiers!
 *3 Relay available with gold contact, upon request!

PRCU 1/48V AC/DC PRCU 1/60V AC/DC PRCU 1/125V AC/DC PRCU 1/240V AC/DC PRCU LW 1/125V AC/DC PRCU LW 1/240V AC



| | | | | | |
|--|--|--|--|---|--|
| PRCU 1/48 V AC/DC 15509.2/10 87.3 x 6.2 x 79.9 mm 36 g 48 V AC/DC 10 x 10 ⁶ /10 x 10 ⁶ 60 x 10 ³ 5/6 ms 4 kV/3 6 kV 1,000 V AC -40 to +70°C RT II -40 to +70°C 10 mm 1x2.5 1x2.5 mm ² 1x14 1x14 AWG 1 CO contact 6/10 A 250/400 VAC* 1,500 VA 300 VA 0.185 kw 6/0.2/0.12 A 300 (5/5) mW (V/mA) AgNi 48 V DC 48 AC 0.2 W (0.8 to 1.1) U _N AC (50/60 Hz) (0.8 to 1.2) U _N DC 0.6 U _N AC/0.6 U _N DC 0.1 U _N AC/0.05 U _N DC | PRCU 1/60 V AC/DC 15510.2/10 87.3 x 6.2 x 79.9 mm 36 g 60 V AC/DC 10 x 10 ⁶ /10 x 10 ⁶ 60 x 10 ³ 5/6 ms 4 kV/3 6 kV 1,000 V AC -40 to +70°C RT II -40 to +70°C 10 mm 1x2.5 1x2.5 mm ² 1x14 1x14 AWG 1 CO contact 6/10 A 250/400 VAC* 1,500 VA 300 VA 0.185 kw 6/0.2/0.12 A 300 (5/5) mW (V/mA) AgNi 60 V DC 60 AC 0.2 W (0.8 to 1.1) U _N AC (50/60 Hz) (0.8 to 1.2) U _N DC 0.6 U _N AC/0.6 U _N DC 0.1 U _N AC/0.05 U _N DC | PRCU 1/125 V AC/DC 15511.2/10*2 87.3 x 6.2 x 79.9 mm 36 g 125 V AC/DC 10 x 10 ⁶ /10 x 10 ⁶ 60 x 10 ³ 5/6 ms 4 kV/3 6 kV 1,000 V AC -40 to +70°C RT II -40 to +70°C 10 mm 1x2.5 1x2.5 mm ² 1x14 1x14 AWG 1 CO contact 6/10 A 250/400 VAC* 1,500 VA 300 VA 0.185 kw 6/0.2/0.12 A 300 (5/5) mW (V/mA) AgNi 110 to 125 V DC 110 to 125 AC 0.2 W (0.8 to 1.1) U _N AC (50/60 Hz) (0.8 to 1.2) U _N DC 0.6 U _N AC/0.6 U _N DC 0.1 U _N AC/0.05 U _N DC | PRCU 1/240 V AC/DC 15512.2/10*2 87.3 x 6.2 x 79.9 mm 36 g 230 V AC/DC 10 x 10 ⁶ /10 x 10 ⁶ 60 x 10 ³ 5/6 ms 4 kV/3 6 kV 1,000 V AC -40 to +70°C RT II -40 to +70°C 10 mm 1x2.5 1x2.5 mm ² 1x14 1x14 AWG 1 CO contact 6/10 A 250/400 VAC* 1,500 VA 300 VA 0.185 kw 6/0.2/0.12 A 300 (5/5) mW (V/mA) AgNi 220 to 240 V DC 220 to 240 AC 0.2 W (0.8 to 1.1) U _N AC (50/60 Hz) (0.8 to 1.2) U _N DC 0.6 U _N AC/0.6 U _N DC 0.1 U _N AC/0.05 U _N DC | PRCU LW 1/125 V AC/DC 15553.2/10*2 87.3 x 6.2 x 79.9 mm 36 g 125 V AC/DC 10 x 10 ⁶ /10 x 10 ⁶ 60 x 10 ³ 5/6 ms 4 kV/3 6 kV 1,000 V AC -40 to +70°C RT II -40 to +70°C 10 mm 1x2.5 1x2.5 mm ² 1x14 1x14 AWG 1 CO contact 6/10 A 250/400 VAC* 1,500 VA 300 VA 0.185 kw 6/0.2/0.12 A 300 (5/5) mW (V/mA) AgNi 110 to 125 V DC 110 to 125 AC 1.0 W (0.8 to 1.1) U _N AC (50/60 Hz) (0.8 to 1.2) U _N DC 0.6 U _N AC/0.6 U _N DC 0.1 U _N AC/0.05 U _N DC | PRCU LW 1/240 V AC 15554.2/10*2 87.3 x 6.2 x 79.9 mm 36 g 230 V AC/ 10 x 10 ⁶ /10 x 10 ⁶ 60 x 10 ³ 5/6 ms 4 kV/3 6 kV 1,000 V AC -40 to +70°C RT II -40 to +70°C 10 mm 1x2.5 1x2.5 mm ² 1x14 1x14 AWG 1 CO contact 6/10 A 250/400 VAC* 1,500 VA 300 VA 0.185 kw 6/0.2/0.12 A 300 (5/5) mW (V/mA) AgNi - V DC 220 to 240 AC 0.5 W (0.8 to 1.1) U _N AC (50/60 Hz) (0.8 to 1.2) U _N DC 0.6 U _N AC/ - U _N DC 0.1 U _N AC/ - U _N DC |
|--|--|--|--|---|--|

PRC 48-60V AC/DC PRC 48-60V AC/DC PRC 110... 125V AC/DC PRC 220... 240V AC/DC PRC LW 110... 125V AC/DC PRC LW 220... 240V AC

| | | | | | |
|--|--|--|--|--|--|
| PRC 1/48V DC 15547.2/10*3 | PRC 1/60V DC 15503.2/10*3 | PRC 1/60V DC 15503.2/10*3 | PRC 1/60V DC 15503.2/10*3 | PRC 1/60V DC 15503.2/10*3 | PRC 1/60V DC 15503.2/10*3 |
|--|--|--|--|--|--|

| | | | | | |
|--|--|--|--|--|--|
| AQI/PRC/20 15545.8/1 15545.5/1 15545.4/1 | AQI/PRC/20 15545.8/1 15545.5/1 15545.4/1 | AQI/PRC/20 15545.8/1 15545.5/1 15545.4/1 | AQI/PRC/20 15545.8/1 15545.5/1 15545.4/1 | AQI/PRC/20 15545.8/1 15545.5/1 15545.4/1 | AQI/PRC/20 15545.8/1 15545.5/1 15545.4/1 |
|--|--|--|--|--|--|

| | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| TW/PRC 15546.2/1 | TW/PRC 15546.2/1 | TW/PRC 15546.2/1 | TW/PRC 15546.2/1 | TW/PRC 15546.2/1 | TW/PRC 15546.2/1 |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|

| | | | | | |
|---|---|---|---|---|---|
| PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 9107.7/300 | PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 9107.7/300 | PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 9107.7/300 | PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 9107.7/300 | PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 9107.7/300 | PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 9107.7/300 |
|---|---|---|---|---|---|

| | | | | | |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| SDB 0.6 x 3.5 1086.0/1 | SDB 0.6 x 3.5 1086.0/1 | SDB 0.6 x 3.5 1086.0/1 | SDB 0.6 x 3.5 1086.0/1 | SDB 0.6 x 3.5 1086.0/1 | SDB 0.6 x 3.5 1086.0/1 |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|

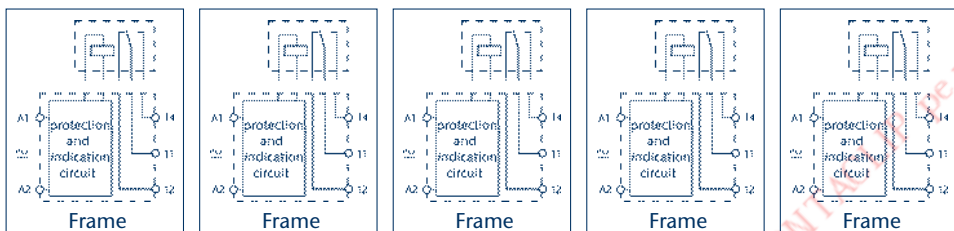
Tension-spring relay terminals **ZPRCU 1/6V DC** **ZPRCU 1/12V DC** **ZPRCU 1/24V DC** **ZPRCU 1/12V AC/DC** **ZPRCU 1/24V AC/DC**

- Consisting of:
basic terminal and pluggable relay.
- Mount on TS 35



Connection diagram

- Internal EMC coil circuitry and LED display
- LW versions:
an internal AC residual-current suppression and LED display



| Type | ZPRCU 1/6V DC | ZPRCU 1/12V DC | ZPRCU 1/24V DC | ZPRCU 1/12V AC/DC | ZPRCU 1/24V AC/DC |
|--|--------------------------------|--------------------------------|--------------------------------|--|--|
| Cat. no./Qty. Type/Colour grey (RAL 7032) | 15524.2/10 | 15525.2/10 | 15526.2/10 | 15518.2/10 | 15519.2/10 |
| Size (L x W x H) with TS 35 x 7.5 | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm |
| Weight | 36 g | 36 g | 36 g | 36 g | 36 g |
| Rated operating voltage | 6 V DC | 12 V DC | 24 V DC | 12 V AC/DC | 24 V AC/DC |
| General information | | | | | |
| Mech. life span AC/DC switching cycles | -/10 x 10 ⁶ | -/10 x 10 ⁶ | -/10 x 10 ⁶ | 10 x 10 ⁶ /10 x 10 ⁶ | 10 x 10 ⁶ /10 x 10 ⁶ |
| Electrical life span AC 1 switching cycles | 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ |
| Response time/release time | 5/6 ms | 5/6 ms | 5/6 ms | 5/6 ms | 5/6 ms |
| Insulation coordination, EN 61810-5 | 4 kV/3 | 4 kV/3 | 4 kV/3 | 4 kV/3 | 4 kV/3 |
| Dielectric strength coil/contacts (1.2/50 μs) | 6 kV | 6 kV | 6 kV | 6 kV | 6 kV |
| Dielectric strength of open contacts | 1,000 V AC | 1,000 V AC | 1,000 V AC | 1,000 V AC | 1,000 V AC |
| Ambient temperature | -40 to +70 °C | -40 to +70 °C | -40 to +70 °C | -40 to +70 °C | -40 to +70 °C |
| Relay protection type | RT II | RT II | RT II | RT II | RT II |
| Ratings for socket base | | | | | |
| Ambient temperature | -40 to +70 °C | -40 to +70 °C | -40 to +70 °C | -40 to +70 °C | -40 to +70 °C |
| Insulation stripping length | 10 mm | 10 mm | 10 mm | 10 mm | 10 mm |
| Max. connection cross-section, solid flexible mm ² | 1x2.5/2x1.5 1x2.5/2x1.5 | 1x2.5/2x1.5 1x2.5/2x1.5 | 1x2.5/2x1.5 1x2.5/2x1.5 | 1x2.5/2x1.5 1x2.5/2x1.5 | 1x2.5/2x1.5 1x2.5/2x1.5 |
| AWG | 1x14/2x16 1x14/2x16 | 1x14/2x16 1x14/2x16 | 1x14/2x16 1x14/2x16 | 1x14/2x16 1x14/2x16 | 1x14/2x16 1x14/2x16 |
| Ratings for plug-relays combined with socket base | | | | | |
| Contacts | | | | | |
| Number of contacts | 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact |
| Max. continuous current Max. inrush current | 6/10 A | 6/10 A | 6/10 A | 6/10 A | 6/10 A |
| Rated voltage Max. switching voltage | 250/400 V AC* | 250/400 V AC* | 250/400 V AC* | 250/400 V AC* | 250/400 V AC* |
| Max. power rating AC 1 | 1,500 VA | 1,500 VA | 1,500 VA | 1,500 VA | 1,500 VA |
| Max. power rating AC 15 (230 V AC) | 300 VA | 300 VA | 300 VA | 300 VA | 300 VA |
| 1-phase motor load, AC 3 operation (230 V AC) | 0.185 kW | 0.185 kW | 0.185 kW | 0.185 kW | 0.185 kW |
| Max. switching current DC 1:30/110/220 V | 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A |
| Min. switching load | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) |
| Standard contact material | AqNi | AqNi | AqNi | AqNi | AqNi |
| Coil | | | | | |
| Rated voltage (U _N) | 5 V DC - AC | 12 V DC - AC | 24 V DC - AC | 12 V DC 12 AC | 24 V DC 24 AC |
| Power rating AC/DC | 0.2 W | 0.2 W | 0.2 W | 0.2 W | 0.2 W |
| Operating range | - | - | - | (0.8 to 1.1) U _N AC (50/60 Hz) | (0.8 to 1.1) U _N AC (50/60 Hz) |
| Holding current | (0.8 to 1.2) U _N DC | (0.8 to 1.2) U _N DC | (0.8 to 1.2) U _N DC | (0.8 to 1.2) U _N DC | (0.8 to 1.2) U _N DC |
| Drop-out voltage | 0.6 U _N DC | 0.6 U _N DC | 0.6 U _N DC | 0.6 U _N AC/0.6 U _N DC | 0.6 U _N AC/0.6 U _N DC |
| | 0.05 U _N DC | 0.05 U _N DC | 0.05 U _N DC | 0.1 U _N AC/0.05 U _N DC | 0.1 U _N AC/0.05 U _N DC |

Individual components, socket base

| Type/Colour grey (RAL 7032) | ZPRC 6-12-24V DC | ZPRC 6-12-24V DC | ZPRC 6-12-24V DC | ZPRC 6-12-24V AC/DC | ZPRC 6-12-24V AC/DC |
|-----------------------------|-------------------|-------------------|-------------------|---------------------|---------------------|
| Cat. no./Qty. | 15494.2/10 | 15494.2/10 | 15494.2/10 | 15492.2/10 | 15492.2/10 |

Individual components, plug relays

| Type/Rated voltage | PRC 1/5V DC | PRC 1/12V DC | PRC 1/24V DC | PRC 1/12V DC | PRC 1/24V DC |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Cat. no./Qty. | 15500.2/10*3 | 15501.2/10*3 | 15502.2/10*3 | 15501.2/10*3 | 15502.2/10*3 |

| Accessories AOI/PRC external insulated cross-connector | AOI/PRC/20 | AOI/PRC/20 | AOI/PRC/20 | AOI/PRC/20 | AOI/PRC/20 |
|---|------------------|------------------|------------------|------------------|------------------|
| Cat. no./Qty. yellow | 15545.8/1 | 15545.8/1 | 15545.8/1 | 15545.8/1 | 15545.8/1 |
| Cat. no./Qty. blue | 15545.5/1 | 15545.5/1 | 15545.5/1 | 15545.5/1 | 15545.5/1 |
| Cat. no./Qty. black | 15545.4/1 | 15545.4/1 | 15545.4/1 | 15545.4/1 | 15545.4/1 |

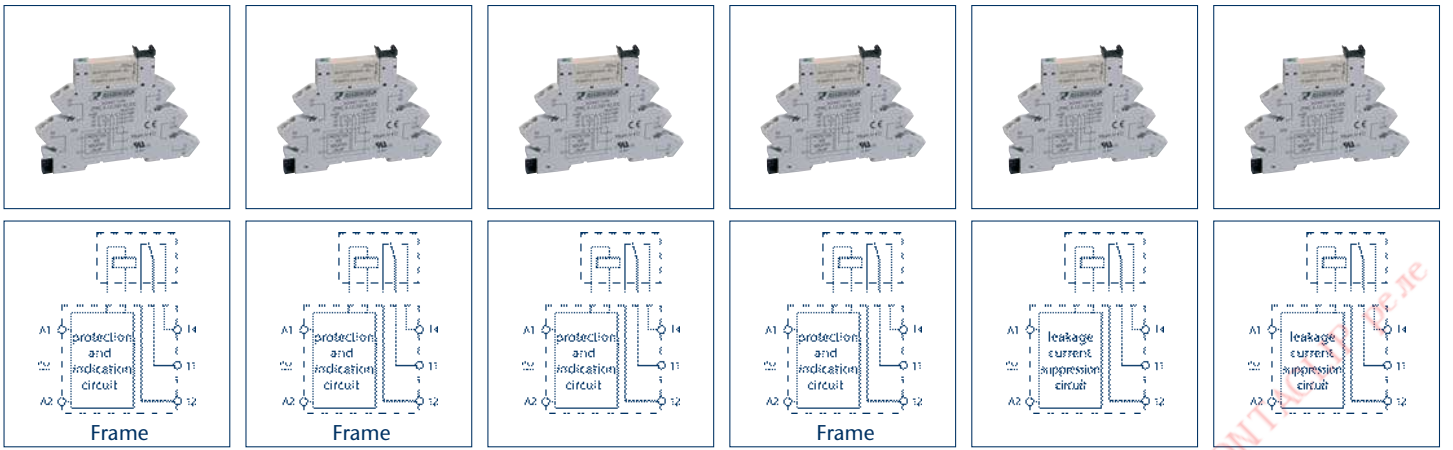
| TW/PRC partitions | TW/PRC | TW/PRC | TW/PRC | TW/PRC | TW/PRC |
|----------------------|------------------|------------------|------------------|------------------|------------------|
| Cat. no./Qty. | 15546.2/1 | 15546.2/1 | 15546.2/1 | 15546.2/1 | 15546.2/1 |

| PMC labelling/markers | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| Cat. no./Qty. , standard print, see catalog | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT |
| Cat. no./Qty. neutral | 9106.7/300 | 9106.7/300 | 9106.7/300 | 9106.7/300 | 9106.7/300 |
| Cat. no./Qty. , special print | 9107.7/300 | 9107.7/300 | 9107.7/300 | 9107.7/300 | 9107.7/300 |

| BWMA metal tool | BWMA 1 | BWMA 1 | BWMA 1 | BWMA 1 | BWMA 1 |
|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Cat. no./Qty. | 3808.0/1 | 3808.0/1 | 3808.0/1 | 3808.0/1 | 3808.0/1 |

* The conditions of pollution degree 2 are fulfilled at 400 V.
 *1 In order for the relay to de-energise, the residual current can be suppressed/controlled via the SPS-230 V semiconductor outputs, longe control lines (LW), thyristors, and inductive proximity switch!
 *2 Since this relay is only produced for DC at a max. 60 V, the adjustment to the operating voltage occurs via the internal resistance and bridge rectifiers!
 *3 Relay available with gold contact, upon request!

ZPRCU 1/48V AC/DC ZPRCU 1/60V AC/DC ZPRCU 1/125V AC/DC ZPRCU 1/240V AC/DC ZPRCU LW 1/125V AC/DC ZPRCU LW 1/240V AC



| ZPRCU 1/48V AC/DC 15520.2/10 | ZPRCU 1/60V AC/DC 15521.2/10 | ZPRCU 1/125V AC/DC 15522.2/10*2 | ZPRCU 1/240V AC/DC 15523.2/10*2 | ZPRCU LW 1/125V AC/DC 15551.2/10*2 | ZPRCU LW 1/240V AC 15552.2/10*2 |
|--|--|--|--|--|--|
| 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm |
| 36 g | 36 g | 36 g | 36 g | 36 g | 36 g |
| 48V AC/DC | 60V AC/DC | 125V AC/DC | 230V AC/DC | 125V AC/DC | 230V AC |
| 10 x 10 ⁶ /10 x 10 ⁶ | 10 x 10 ⁶ /10 x 10 ⁶ | 10 x 10 ⁶ /10 x 10 ⁶ | 10 x 10 ⁶ /10 x 10 ⁶ | 10 x 10 ⁶ /10 x 10 ⁶ | 10 x 10 ⁶ /10 x 10 ⁶ |
| 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ | 60 x 10 ³ |
| 5/6 ms | 5/6 ms | 5/6 ms | 5/6 ms | 5/6 ms | 5/6 ms |
| 4 kV/3 | 4 kV/3 | 4 kV/3 | 4 kV/3 | 4 kV/3 | 4 kV/3 |
| 6 kV | 6 kV | 6 kV | 6 kV | 6 kV | 6 kV |
| 1,000 V AC | 1,000 V AC | 1,000 V AC | 1,000 V AC | 1,000 V AC | 1,000 V AC |
| -40 to +70 °C | -40 to +70 °C | -40 to +70 °C | -40 to +70 °C | -40 to +70 °C | -40 to +70 °C |
| RT II | RT II | RT II | RT II | RT II | RT II |
| -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C |
| 10 mm | 10 mm | 10 mm | 10 mm | 10 mm | 10 mm |
| 1x2.5/2x1.5 1x2.5/2x1.5 | 1x2.5/2x1.5 1x2.5/2x1.5 | 1x2.5/2x1.5 1x2.5/2x1.5 | 1x2.5/2x1.5 1x2.5/2x1.5 | 1x2.5/2x1.5 1x2.5/2x1.5 | 1x2.5/2x1.5 1x2.5/2x1.5 |
| 1x14/2x16 1x14/2x16 | 1x14/2x16 1x14/2x16 | 1x14/2x16 1x14/2x16 | 1x14/2x16 1x14/2x16 | 1x14/2x16 1x14/2x16 | 1x14/2x16 1x14/2x16 |
| 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact |
| 6/10 A | 6/10 A | 6/10 A | 6/10 A | 6/10 A | 6/10 A |
| 250/400 V AC* | 250/400 V AC* | 250/400 V AC* | 250/400 V AC* | 250/400 V AC* | 250/400 V AC* |
| 1,500 VA | 1,500 VA | 1,500 VA | 1,500 VA | 1,500 VA | 1,500 VA |
| 300 VA | 300 VA | 300 VA | 300 VA | 300 VA | 300 VA |
| 0.185 kW | 0.185 kW | 0.185 kW | 0.185 kW | 0.185 kW | 0.185 kW |
| 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A | 6/0.2/0.12 A |
| 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) |
| AqNi | AqNi | AqNi | AqNi | AqNi | AqNi |
| 48 V DC 48 AC | 60 V DC 60 AC | 110...125 V DC 110...125 AC | 220...240 V DC 220...240 AC | 110...125 V DC 110...125 AC | - V DC 220...240 AC |
| 0.2 W | 0.2 W | 0.2 W | 0.2 W | 1.0 W | 0.5 W |
| (0.8 to 1.1) U _N AC (50/60 Hz) | (0.8 to 1.1) U _N AC (50/60 Hz) | (0.8 to 1.1) U _N AC (50/60 Hz) | (0.8 to 1.1) U _N AC (50/60 Hz) | (0.8 to 1.1) U _N AC (50/60 Hz) | (0.8 to 1.1) U _N AC (50/60 Hz) |
| (0.8 to 1.2) U _N DC | (0.8 to 1.2) U _N DC | (0.8 to 1.2) U _N DC | (0.8 to 1.2) U _N DC | (0.8 to 1.2) U _N DC | (0.8 to 1.2) U _N DC |
| 0.6 U _N AC/0.6 U _N DC | 0.6 U _N AC/0.6 U _N DC | 0.6 U _N AC/0.6 U _N DC | 0.6 U _N AC/0.6 U _N DC | 0.6 U _N AC/0.6 U _N DC | 0.6 U _N AC/ - U _N DC |
| 0.1 U _N AC/0.05 U _N DC | 0.1 U _N AC/0.05 U _N DC | 0.1 U _N AC/0.05 U _N DC | 0.1 U _N AC/0.05 U _N DC | 0.1 U _N AC/0.05 U _N DC | 0.1 U _N AC/ - U _N DC |

ZPRC 48-60V AC/DC ZPRC 48-60V AC/DC ZPRC 110...125V AC/DC ZPRC 220...240V AC/DC ZPRC LW 110...125 V AC/DC ZPRC LW 220...240V A

| | | | | | |
|------------|------------|------------|------------|------------|------------|
| 15498.2/10 | 15498.2/10 | 15499.2/10 | 15493.2/10 | 15556.2/10 | 15495.2/10 |
|------------|------------|------------|------------|------------|------------|

PRC 1/48V DC PRC 1/60V DC PRC 1/60V DC PRC 1/60V DC PRC 1/60V DC PRC 1/60V DC

| | | | | | |
|--------------|--------------|--------------|--------------|--------------|--------------|
| 15547.2/10*3 | 15503.2/10*3 | 15503.2/10*3 | 15503.2/10*3 | 15503.2/10*3 | 15503.2/10*3 |
|--------------|--------------|--------------|--------------|--------------|--------------|

| AQI/PRC/20 | AQI/PRC/20 | AQI/PRC/20 | AQI/PRC/20 | AQI/PRC/20 | AQI/PRC/20 |
|------------|------------|------------|------------|------------|------------|
| 15545.8/1 | 15545.8/1 | 15545.8/1 | 15545.8/1 | 15545.8/1 | 15545.8/1 |
| 15545.5/1 | 15545.5/1 | 15545.5/1 | 15545.5/1 | 15545.5/1 | 15545.5/1 |
| 15545.4/1 | 15545.4/1 | 15545.4/1 | 15545.4/1 | 15545.4/1 | 15545.4/1 |

| TW/PRC | TW/PRC | TW/PRC | TW/PRC | TW/PRC | TW/PRC |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 15546.2/1 | 15546.2/1 | 15546.2/1 | 15546.2/1 | 15546.2/1 | 15546.2/1 |

| PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 |
|---------------|---------------|---------------|---------------|---------------|---------------|
| CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT |
| 9106.7/300 | 9106.7/300 | 9106.7/300 | 9106.7/300 | 9106.7/300 | 9106.7/300 |
| 9107.7/300 | 9107.7/300 | 9107.7/300 | 9107.7/300 | 9107.7/300 | 9107.7/300 |

| BWMA 1 | BWMA 1 | BWMA 1 | BWMA 1 | BWMA 1 | BWMA 1 |
|----------|----------|----------|----------|----------|----------|
| 3808.0/1 | 3808.0/1 | 3808.0/1 | 3808.0/1 | 3808.0/1 | 3808.0/1 |

Compact plug relays PRC

Relay terminals with 2-CO relays

The new **PRC 2W** relay bases enable the integration of relays with two CO contacts into the proven **PRC** relay system. This base also features the well-known advantages of this system, including simple bridging with jumpers and a thin design. They are available either with tension-spring or screw connection. Dependable functioning is always certain because of the combination with the proven **PRS**-system relays.

1. Overview

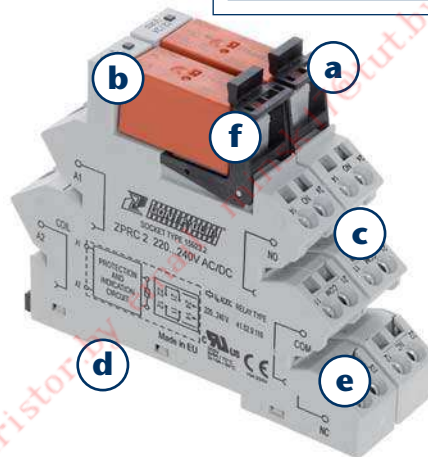
b Pluggable relays
Pluggable relays are also available with AgSNO and gold contacts, to fit with the many functions of your individual requirements!



a Using the mount/dismount lever
The mounting and dismounting mechanism forms a reliable connection by latching the relay with the socket base. The fitted relay can be removed, easily and without force, from the socket base by using the dismount function of the lever!



d Mounts on standard TS 35 rail
CONTA-CLIP relay terminal can be flexibly mounted on standard TS 35 mounting rails according to EN 50035 and EN 50022.



c Pluggable external cross-connections
The **AQI / PRC** pluggable cross-connection system enables a time-saving distribution of potentials. The **AQI / PRC** is constructed so that it is protected against accidental touch. It is available as a 8-pole unit, in either yellow, blue or black. The cross-connector can be shortened to fewer poles in order to fit the required interface. Insulation plating can be used to insulate the ends.



e Connection types
All of our relay terminals are optionally available with screw or tension-spring connection systems.



f Labelling | Marking
The socket bases have a labelling surface which is optimally suited for our PMC Pocket-Maxicard (**MC GS 6x12 R**) standard marking system. **CONTA-CLIP** can also provide "just-in-time" individual labelling for you.

2. Approvals (Details upon request)

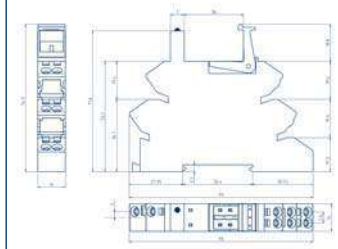


3. Features

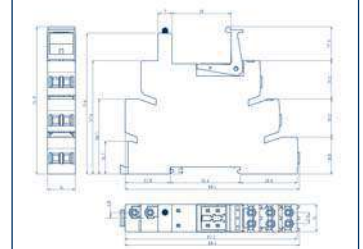
1. Socket base

- Mount on TS 35
- Very flexible and modular construction of individual relay bases
- User-friendly, because the relays can be easily replaced
- High-quality connection terminals (Tension-spring or screw connection system)
- Integrated EMC coil circuitry, and LED
- High-quality innovative mount/dismount lever
- All versions are available either with the screw or tension-spring connection system

Tension-spring connection



Screw connection

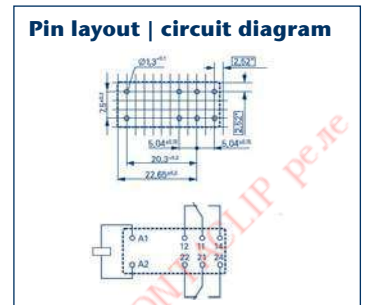
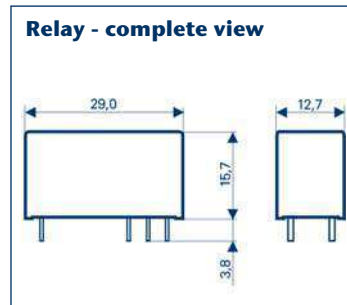


Compact plug relays PRC

Relay terminals with 2-CO relays

II. Relay

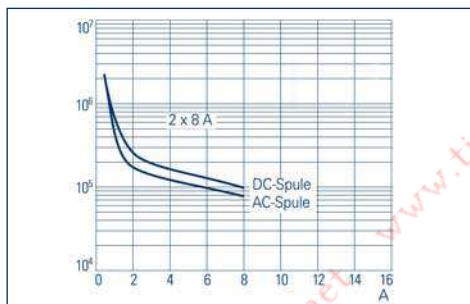
- PLUG RELAY SYSTEM relay 2-CO
- Load-independent switching
- Direct control via the PLC outputs
- High interference immunity
- Electrical isolation of control and load circuits
- Minimal contact resistance, and high insulation resistance



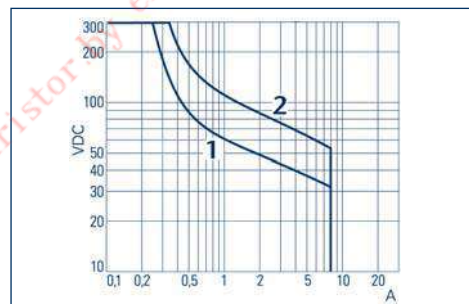
4. Specifications

| Insulation data | | | | |
|------------------------------------|--------------------------|---------------------|--|-----------------------|
| Dielectric strength | Coil-contact arrangement | 5000 Veff | Flammability class acc. to UL94 | V0 |
| | Opened contact | 1000 Veff | Ambient temperature range | -40/+85°C |
| | Adjacent contacts | 2500 Veff | Response/release time of DC coil | typ. 7 / 2 ms |
| Clearance/creepage distances | Coil-contact arrangement | ≤ 10 / 10 mm | Bounce time of DC spool, NO / NC | typ. 1 / 3 ms |
| | Adjacent contacts | ≤ 3 / 4 mm | Fatigue strength (functional), NO / NC | 20 / 5 g, 30 – 500 Hz |
| Insulating material group | | ≤ IIIa | Shock resistance (destructive) | 100 g |
| Creep resistance of carrier | | PTI 250 V | Protection | RTII |
| Insulation acc. to IEC 60664-1 | | | Mounting interval | 0 mm, dens. packaged |
| Type of insulation | Coil-contact arrangement | Strengthened insul. | Weight | 14 g |
| | Opened contact | Functional insul. | | |
| | Adjacent contacts | Basic insul. | | |
| Rated voltage | | 250 V | | |
| Pollution degree | | 3 | | |
| Nominal volt. of the supply system | | 240/400 V | | |
| Overvoltage category | | III | | |

5. Contact data



Contact life span under 250 V AC resistive load



Switching capacity under DC load

Resistive load

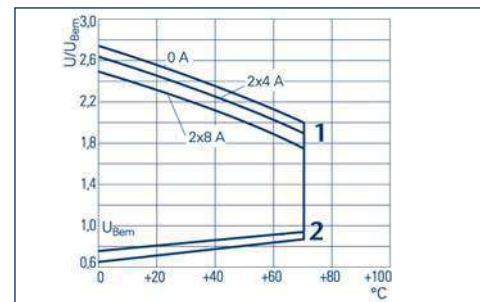
1 one contact

2 two contacts in series

6. Coil data

DC version

| Rated voltage | Operating Range | | Resistance | Rated current |
|---------------|-----------------|----------------|-------------|---------------|
| | U_N V | U_{min} V | | |
| 5 | 3.5 | 0.5 | 62 ± 10% | 403 |
| 6 | 4.20 | 0.6 | 90 ± 10% | 400 |
| 12 | 8.4 | 1.2 | 360 ± 10% | 400 |
| 24 | 16.80 | 2.4 | 1440 ± 10% | 400 |
| 48 | 33.60 | 4.8 | 5520 ± 10% | 417 |
| 60 | 42.00 | 6.0 | 8570 ± 12% | 420 |
| 110 | 77.0 | 11.0 | 28800 ± 13% | 420 |




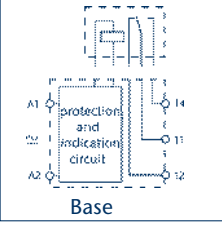
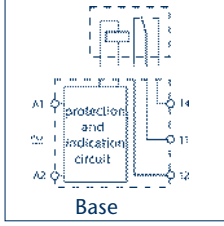
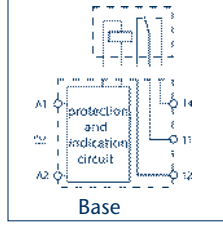


Reliable range of operating voltage

1 Max. permitted coil voltage

2 Response voltage, when coil temperature equal to ambient temperature

Compact plug relays PRC




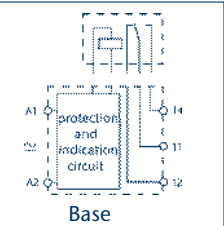
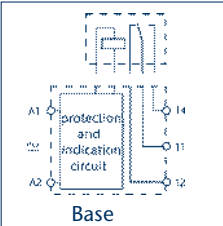
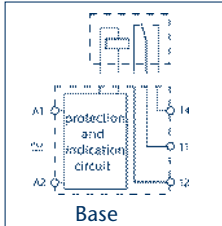
| Relay terminal tension-spring/screw connection | PRCU 2/12V AC/DC | PRCU 2/24V AC/DC | PRCU 2/240V AC/DC | |
|--|---|--|---|--|
| <ul style="list-style-type: none"> consisting of: Basic terminal and pluggable relay Mount on TS 35 |  |  |  | |
| Connection diagram |  |  |  | |
| <ul style="list-style-type: none"> Internal EMC coil circuitry and LED display | | | | |
| Type | PRCU 2/12V AC/DC | PRCU 2/24V AC/DC | PRCU 2/240V AC/DC | |
| Cat. no./Qty. | 15924.2/1 | 15925.2/1 | 15926.2/1 | |
| Size (L x W x H) with TS 35 | 92 x 14 x 82 mm | 92 x 14 x 82 mm | 92 x 14 x 82 mm | |
| Weight | 68 g | 68 g | 68 g | |

| Type | PRS 2/12 V DC | PRS 2/24 V DC | PRS 2/110 V DC | |
|--|--|-----------------------|-----------------------|--|
| Cat. no./Qty. | 6482.2/1 | 6483.2/1 | 15541.2/1 | |
| Weight | 15 g | 15 g | 15 g | |
| General information | | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | |
| Test voltage coil/contact | 5 kV | 5 kV | 5 kV | |
| Pinning | 5 mm | 5 mm | 5 mm | |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | |
| Input data | | | | |
| Input voltage | 12 V DC | 24 V DC | 110 V DC | |
| Rated power consumption | 0.40 W | 0.40 W | 0.40 W | |
| Output data | | | | |
| Contacts | 2 CO contacts | 2 CO contacts | 2 CO contacts | |
| Switching voltage/Max. switching voltage | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | |
| Max continuous current/inrush current | 8 A/15 A | 8 A/15 A | 8 A/15 A | |
| Typical response time/release time | 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms | |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | |
| Electrical life span | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | |
| At contact load | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | |
| Mechanical life span | >30 x 10 ⁶ | >30 x 10 ⁶ | >30 x 10 ⁶ | |

| Type | PRC 2 6-12-24V AC/DC | PRC 2 6-12-24V AC/DC | PRC 2 220 – 240V AC/DC | |
|--|--|--|--|--|
| Cat. no./Qty. | 15920.2/10 | 15920.2/10 | 15921.2/10 | |
| Weight | 53 g | 53 g | 53 g | |
| General | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | |
| Plug-in base for | 5 mm pinning | 5 mm pinning | 5 mm pinning | |
| Connection type | Screw connection | Screw connection | Screw connection | |
| Technical data | | | | |
| Rated current | 10 A | 10 A | 10 A | |
| Rated voltage | 250 V | 250 V | 250 V | |
| Dielectric strength coil/contact | 6 kv (1.2/50 μs) | 6 kv (1.2/50 μs) | 6 kv (1.2/50 μs) | |
| Ambient temperature | -40 to +70°C | -25 to +70°C | -40 to +55°C | |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | |
| Flammability class UL 94 | V-0 | V-0 | V-0 | |
| Torque | 0.5 Nm | 0.5 Nm | 0.5 Nm | |
| Connection cross-section, solid, max. | 1x6/2x2.5mm ² 1x10/2x14 AWG | 1x6/2x2.5mm ² 1x10/2x14 AWG | 1x6/2x2.5mm ² 1x10/2x14 AWG | |
| Connection cross-section, stranded, max. | 1x4/2x2.5mm ² 1x12/2x14 AWG | 1x4/2x2.5mm ² 1x12/2x14 AWG | 1x4/2x2.5mm ² 1x12/2x14 AWG | |
| Insulation stripping length | 8 mm | 8 mm | 8 mm | |
| Approvals | UL/CUL | UL/CUL | UL/CUL | |

| Accessories AQI/PRC external insulated cross-connector | AQI/PRC/8 | AQI/PRC/8 | AQI/PRC/8 | |
|--|----------------------|----------------------|----------------------|--|
| Cat. no./Qty. yellow | 15930.8/1 | 15930.8/1 | 15930.8/1 | |
| Cat. no./Qty. blue | 15930.5/1 | 15930.5/1 | 15930.5/1 | |
| Cat.-No./Qty. black | 15930.4/1 | 15930.4/1 | 15930.4/1 | |
| TW/PRC partitions | TW/PRC | TW/PRC | TW/PRC | |
| Cat. no./Qty. | 15546.2/1 | 15546.2/1 | 15546.2/1 | |
| Tool/screw driver | SDB 0,6 x 3,5 | SDB 0,6 x 3,5 | SDB 0,6 x 3,5 | |
| Cat. no./Qty. | 1086.0/1 | 1086.0/1 | 1086.0/1 | |
| MC labelling / markers | MC GS 6x12 R | MC GS 6x12 R | MC GS 6x12 R | |
| Cat. no./Qty., blank | 3884.7/600 | 3884.7/600 | 3884.7/600 | |
| Cat. no./Qty., special print | 3885.7/600 | 3885.7/600 | 3885.7/600 | |

Compact plug relays PRC

| ZPRCU 2/12V AC/DC | ZPRCU 2/24V AC/DC | ZPRCU 2/240V AC/DC | | | |
|--|---|---|--|--|--|
|  |  |  | | | |
|  |  |  | | | |
| ZPRCU 2/12V AC/DC 15927.2/1 93 x 14 x 82 mm 63 g | ZPRCU 2/24V AC/DC 15928.2/1 93 x 14 x 82 mm 63 g | ZPRCU 2/240V AC/DC 15929.2/1 93 x 14 x 82 mm 63 g | | | |

| PRS 2/12 V DC | PRS 2/24 V DC | PRS 2/110 V DC | | | |
|--|-----------------------|-----------------------|--|--|--|
| 6482.2/1 | 6483.2/1 | 15541.2/1 | | | |
| 15 g | 15 g | 15 g | | | |
| Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | | | |
| 5 kV | 5 kV | 5 kV | | | |
| 5 mm | 5 mm | 5 mm | | | |
| -40 to +70°C | -40 to +70°C | -40 to +70°C | | | |
| 12 V DC | 24 V DC | 110 V DC | | | |
| 0.40 W | 0.40 W | 0.40 W | | | |
| 2 CO contacts | 2 CO contacts | 2 CO contacts | | | |
| 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | | | |
| 8 A/15 A | 8 A/15 A | 8 A/15 A | | | |
| 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms | | | |
| AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | | | |
| 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | | | |
| 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | | | |
| >30 x 10 ⁶ | >30 x 10 ⁶ | >30 x 10 ⁶ | | | |

| ZPRC 2 6-12-24V AC/DC | ZPRC 2 6-12-24V AC/DC | ZPRC 2 220-240V AC/DC | | | |
|-----------------------------------|-----------------------------------|-----------------------------------|--|--|--|
| 15922.2/10 | 15922.2/10 | 15923.2/10 | | | |
| 48 g | 48 g | 48 g | | | |
| TS 35 | TS 35 | TS 35 | | | |
| 5 mm pinning | 5 mm pinning | 5 mm pinning | | | |
| Tension-spring connection | Tension-spring connection | Tension-spring connection | | | |
| 10 A | 10 A | 10 A | | | |
| 250 V | 250 V | 250 V | | | |
| 6 kv (1.2/50 μs) | 6 kv (1.2/50 μs) | 6 kv (1.2/50 μs) | | | |
| -40 to +70°C | -40 to +70°C | -40 to +55°C | | | |
| IP 20 | IP 20 | IP 20 | | | |
| V-0 | V-0 | V-0 | | | |
| - | - | - | | | |
| 1 x 2.5 mm ² 1x14 AWG | 1 x 2.5 mm ² 1x14 AWG | 1 x 2.5 mm ² 1x14 AWG | | | |
| 1 x 2.5 mm ² 1x14 AWG | 1 x 2.5 mm ² 1x14 AWG | 1 x 2.5 mm ² 1x14 AWG | | | |
| 8 mm | 8 mm | 8 mm | | | |
| UL/CUL | UL/CUL | UL/CUL | | | |

| AQI/PRC/8 | AQI/PRC/8 | AQI/PRC/8 | | | |
|-------------------|-------------------|-------------------|--|--|--|
| 15930.8/1 | 15930.8/1 | 15930.8/1 | | | |
| 15930.5/1 | 15930.5/1 | 15930.5/1 | | | |
| 15930.4/1 | 15930.4/1 | 15930.4/1 | | | |
| TW/PRC | TW/PRC | TW/PRC | | | |
| 15546.2/1 | 15546.2/1 | 15546.2/1 | | | |
| BWMA 1 | BWMA 1 | BWMA 1 | | | |
| 3808.0/1 | 3808.0/1 | 3808.0/1 | | | |
| MC GS 6x12 R | MC GS 6x12 R | MC GS 6x12 R | | | |
| 3884.7/600 | 3884.7/600 | 3884.7/600 | | | |
| 3885.7/600 | 3885.7/600 | 3885.7/600 | | | |

Plug relay system PRS

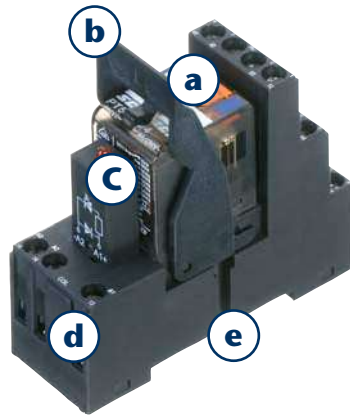
Screw-clamp connection

1. Overview

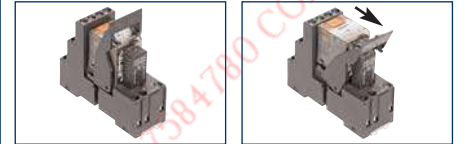
a Pluggable relays
Pluggable relays are also available with AgSNO and gold contacts, to fit with the many functions of your individual requirements!



e Mounts on standard TS 35 rail
CONTA-CLIP relay bases can be flexibly mounted on standard TS 35 mounting rails according to EN 50035 and EN 50022.



b Using the mount/dismount lever
The mounting and dismounting mechanism forms a reliable connection by latching the relay with the socket base. The fitted relay can be removed, easily and without force, from the socket base by using the dismount function of the lever!



AQI/PRS external cross-connector

d The AQI/PRS external cross-connection system enables a time-saving distribution of potentials. With this system, you can save time when coupling multiple relay components.

c Pluggable LED and protective modules
Pluggable modules allow easy insertion into the base module, with reverse-connect protection. Their circuitry is effective in parallel to the coil of the deployed relay.



2. Features

1. Relay

- **PLUG RELAY SYSTEM** (relays with 1, 2, or 4 COs)
- Load-independent switching
- Direct control via the SPS outputs
- High interference immunity
- Electrical isolation of control and load circuits
- Minimal contact resistance, and high insulation resistance
- PRS XT relay features switch/button for HAND/AUTOMATIC switching and an integrated LED to show the status of the switch
- PRS 4 relay features switch/button for HAND/AUTOMATIC switching
- PRS 4 eco relay features switch/button for HAND/AUTOMATIC switching, and an integrated LED for signalling the switching status

Technical data for the available relays can be found on the following product pages.

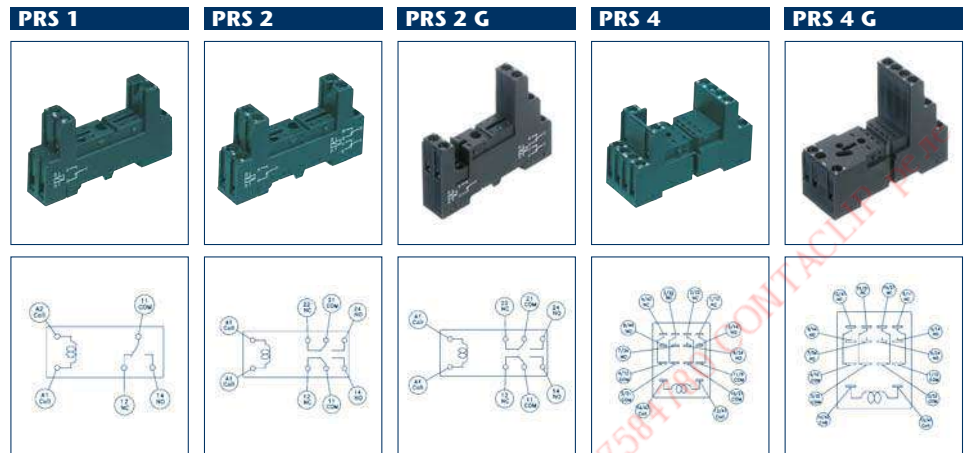


Plug relay system PRS

Screw-clamp connection

II. Socket base

- Mount on TS 35
- Very flexible and modular construction of individual relay bases
- User-friendly, because the relays can be easily replaced
- High-quality connection terminals
- Wire strands protected against false insertion
- Terminal screws retention prevents loss
- Pluggable LED display with additional protective circuitry
- Holding clamp made of high-quality plastic

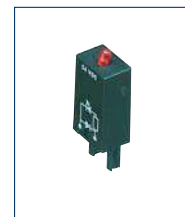


| Type | PRS 1 | PRS 2 | PRS 2 G | PRS 4 | PRS 4 G |
|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Cat. no./Qty. | 15135.2/1 | 15136.2/1 | 15320.2/1 | 15137.2/1 | 15324.2/1 |
| Size (L x W x H) with TS 35 | 76 x 15.7 x 46 mm | 76 x 15.7 x 46 mm | 76 x 15.7 x 65 mm | 76 x 27.1 x 47 mm | 76 x 27.1 x 66 mm |
| Size with holding clamp (L x W x H) with TS 35 | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm | 76 x 27.1 x 85 mm | 76 x 27.1 x 87 mm |
| Weight | 33 g | 38 g | 43 g | 63 g | 65 g |
| General | | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in modules for | 3.5mm pinning | 5mm pinning | 5mm pinning | 2.8mm fast-on | 2.8mm fast-on |
| Connection type | Screw connection | Screw connection | Screw connection | Screw connection | Screw connection |
| Technical data | | | | | |
| Rated current | 12 A | 10 A | 10 A | 10 A | 10 A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength coil/contact | 4000 Veff | 4000 Veff | 4000 Veff | 2400 Veff | 2400 Veff |
| Insulation group (VDE 0110 b) | C/250 V | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25 to +80°C | -25 to +80°C | -25 to +80°C | -25 to +80°C | -25 to +80°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² |
| With ferrules | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² |
| Screw torque | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

III. Insert modules

- Plugs simply into the base, reverse-connect protection
- Circuitry parallel to coil

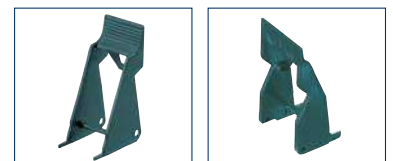
| Cat. no./Qty. | Type | Voltage range | |
|------------------|--------------------------|------------------|--------------------------------------|
| 15141.2/1 | PRS LED(RD) 24V DC | 12 to 24 V DC | Status display with free-wheel diode |
| 15142.2/1 | PRS LED(RD) 230V AC | 110 to 230 V AC | Status display |
| 15175.2/1 | PRS LED(RD) 24V UC | 12 to 48 V AC/DC | Status display |
| 15422.2/1 | PRS LED(RD)/110V DC | 60 to 110 V DC | Status display with free-wheel diode |
| 15810.2/1 | PRS LED(RD) 230V UC Var. | 24 V AC/DC | Status display with varistor |
| 16070.2/1 | PRS LED(GN) 24V UC Var. | 230 V AC/DC | Status display with varistor |
| 15808.2/1 | PRS RC 24V AC | 24 V AC | Plug-in module with RC element |
| 15809.2/1 | PRS RC 240V AC | 240 V AC | Plug-in module with RC element |



IV. Holding clamp

The mount/dismount clamp forms a reliable connection by latching the relay with the socket base. The fitted relay can be removed, easily and without force, from the socket base by using the dismant function of the lever.

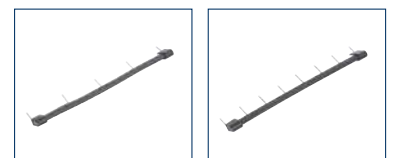
| Cat. no./Qty. | Type | Weight |
|------------------|-------------|--------|
| 15138.2/1 | PRS C 1/C 2 | 2 g |
| 15140.2/1 | PRS C 4 | 4 g |
| 15628.2/1 | PRS C 4 eco | 4 g |
| 16016.2/1 | PRSXT C1/2 | 4 g |







V. Contact bridge

- A simple and quick bridge to multiple relay blocks

| Cat. no./Qty. | Type | Weight |
|------------------|-----------|--|
| 15778.2/1 | AQI PRS/5 | A contact bridge, for bridging five PRS 4 4 CO frames |
| 15779.2/1 | AQI PRS/8 | A contact bridge for bridging up to 8 PRS 1 or PRS 2 1 and 2 CO frames |



Relay 1-CO PRS 1 XT

| Complete screw-connection units consisting of: | PRSXT 1/24V DC | PRSXT 1/24V AC | PRSXT 1/230V DC | PRSXT 1G/24V DC |
|---|---|--|---|---|
| <ul style="list-style-type: none"> Relay Socket base Holding clamp |  |  |  |  |
| Type | PRSXT 1/24V DC | PRSXT 1/24V AC | PRSXT 1/230V DC | PRSXT 1G/24V DC |
| Cat. no./Qty. | 16086.2 / 1 | 16087.2 / 1 | 16088.2 / 1 | 16089.2 / 1 |
| Size (L x W x H) with TS 35 x 7.5 | 76 x 15.7 x 76 mm | 76 x 15.7 x 76 mm | 76 x 15.7 x 76 mm | 76 x 15.7 x 76 mm |
| Weight | 56g | 56g | 56g | 56g |

Individual components Relay 1W, open design, with switch and status display


| Type | PRSXT 1/24V DC | PRSXT 1/24V AC | PRSXT 1/230V DC | PRSXT 1/24V DC |
|--|--|-----------------------|-----------------------|-----------------------|
| Cat. no./Qty. | 16083.2 / 1 | 16084.2 / 1 | 16085.2 / 1 | 16083.2 / 1 |
| Dimensions (L x W x H) | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm |
| Weight | 16g | 16g | 16g | 16g |
| Common data | | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, Rated voltage 250 V, contamination degree 3, Overvoltage category III, Flammability class UL 94 V-0 | | | |
| Test voltage coil/contact | 2.5 kV | 2.5 kV | 2.5 kV | 2.5 kV |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C |
| Lockable test button | yes | yes | yes | yes |
| Indicators | red LED | red LED | red LED | red LED |
| Mechanical indicator | yes | yes | yes | yes |
| Free-wheel diode | yes | no | no | yes |
| Input data | | | | |
| Input voltage | 24 V DC | 24V AC | 230V AC | 24 V DC |
| Rated power consumption | 0.4W | 0.76VA | 0.74VA | 0.4W |
| Frequency | - | 50/60 Hz | 50/60 Hz | - |
| Output specifications | | | | |
| Contacts | 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact |
| Switching voltage/Max. switching voltage | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC |
| Max. continuous current | 16 A, 240 V AC | 16 A, 240 V AC | 16 A, 240 V AC | 16 A, 240 V AC |
| Max. inrush current 4s / 30 ms | 30 A /300 A | 30 A /300 A | 30 A /300 A | 30 A /300 A |
| Max. contact load | 4000 VA | 4000 VA | 4000 VA | 4000 VA |
| Min. suggested contact load | 12V at 10mA | 12V at 10mA | 12V at 10mA | 12V at 10mA |
| Voltage drop | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC |
| Max. switching frequency at operating load | 360 Cycles per hour | 360 Cycles per hour | 360 Cycles per hour | 360 Cycles per hour |
| Max. switching frequency without load | 36000 Cycles per hour | 36000 Cycles per hour | 36000 Cycles per hour | 36000 Cycles per hour |
| Typical response time/release time | 8 ms/6 ms | 8 ms/6 ms | 8 ms/6 ms | 8 ms/6 ms |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 |
| Electrical service life | 50 x 10 ³ | 50 x 10 ³ | 50 x 10 ³ | 50 x 10 ³ |
| Mechanical service life | 10 x 10 ⁶ | 5 x 10 ⁶ | 5 x 10 ⁶ | 10 x 10 ⁶ |

Socket base

| Type | PRS 2 | PRS 2 | PRS 2 | PRS 2 G |
|------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Cat. no./Qty. | 15136.2 / 1 | 15136.2 / 1 | 15136.2 / 1 | 15320.2 / 1 |
| Overview | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in base for | 5mm pinning | 5mm pinning | 5mm pinning | 5mm pinning |
| Connection type | Screw connection | Screw connection | Screw connection | Screw connection |
| Technical data | | | | |
| Rated current | 10A | 10A | 10A | 10A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength | 4000 Veff | 4000 Veff | 4000 Veff | 4000 Veff |
| Insulation group (VDE 0110b) | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25... +80°C | -25... +80°C | -25... +80°C | -25... +80°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² |
| With ferrules | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² |
| Screw torque | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm |
| Stripping length | 7 mm | 7 mm | 7 mm | 7 mm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

Holding clamp

| Type | PRSXT C1/2 | PRSXT C1/2 | PRSXT C1/2 | PRSXT C1/2 |
|---------------|--------------|--------------|--------------|--------------|
| Cat. no./Qty. | 16016.2 / 20 | 16016.2 / 20 | 16016.2 / 20 | 16016.2 / 20 |

| | | | | | |
|--|---|--|--|--|--|
| PRSXT 1G/24V AC | PRSXT 1/230V DC | | | | |
|  |  | | | | |
| PRSXT 1G/24V AC 16090.2 / 1 | PRSXT 1G/230V AC 16091.2 / 1 | | | | |
| 76 x 15.7 x 76 mm | 76 x 15.7 x 76 mm | | | | |
| 56g | 56g | | | | |
| PRSXT 1/24V AC | | | | | |
| 16084.2 / 1 | PRSXT 1/230V DC 16085.2 / 1 | | | | |
| 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | | | | |
| 16g | 16g | | | | |
| Insulation IEC 664/VDE 0110, 2.5 KV | Rated voltage 250 V, contamination degree 3, Overvoltage category III, Flammability class UL 94 V-0 | | | | |
| -40 to +70°C | -40 to +70°C | | | | |
| yes | yes | | | | |
| red LED | red LED | | | | |
| yes | yes | | | | |
| no | no | | | | |
| 24V AC | 230V AC | | | | |
| 0.76VA | 0.74VA | | | | |
| 50/60 Hz | 50/60 Hz | | | | |
| 1 CO contact | 1 CO contact | | | | |
| 240 V AC/400 V AC | 240 V AC/400 V AC | | | | |
| 16 A, 240 V AC | 16 A, 240 V AC | | | | |
| 30 A /300 A | 30 A /300 A | | | | |
| 4000 VA | 4000 VA | | | | |
| 12V at 10mA | 12V at 10mA | | | | |
| 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | | | | |
| 360 Cycles per hour | 360 Cycles per hour | | | | |
| 36000 Cycles per hour | 36000 Cycles per hour | | | | |
| 8 ms/6 ms | 8 ms/6 ms | | | | |
| AgNi 90/10 | AgNi 90/10 | | | | |
| 50 x 10 ³ | 50 x 10 ³ | | | | |
| 5 x 10 ⁶ | 5 x 10 ⁶ | | | | |
| PRS 2 G | | | | | |
| 15320.2 / 1 | 15320.2 / 1 | | | | |
| TS 35 | TS 35 | | | | |
| 5mm pinning | 5mm pinning | | | | |
| Screw connection | Screw connection | | | | |
| 10A | 10A | | | | |
| 300 V | 300 V | | | | |
| 4000 Veff | 4000 Veff | | | | |
| C/250 V | C/250 V | | | | |
| -25... +80°C | -25... +80°C | | | | |
| IP 20 | IP 20 | | | | |
| V-0 | V-0 | | | | |
| VBG 4 | VBG 4 | | | | |
| 2 x 2.5 mm ² | 2 x 2.5 mm ² | | | | |
| 2 x 1.5 mm ² | 2 x 1.5 mm ² | | | | |
| max. 0.8 Nm | max. 0.8 Nm | | | | |
| 7 mm | 7 mm | | | | |
| UL/CSA | UL/CSA | | | | |
| PRSXT C1/2 | | | | | |
| 16016.2 / 20 | 16016.2 / 20 | | | | |

Relay 2-CO PRS 2 XT

Complete screw-connection units

- consisting of:
- Relay
 - Socket base
 - Holding clamp

| Type | PRSXT 2/24V DC | PRSXT 2/24V AC | PRSXT 2/230V | PRSXT 2G/24V DC |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|
| Cat. no./Qty. | 16017.2 / 1 | 16018.2 / 1 | 16019.2 / 1 | 16020.2 / 1 |
| Size (L x W x H) with TS 35 x 7.5 | 76 x 15.7 x 76 mm | 76 x 15.7 x 76 mm | 76 x 15.7 x 76 mm | 76 x 15.7 x 76 mm |
| Weight | 56g | 56g | 56g | 56g |

Individual components

Relay 2W, open design, with switch and status display



| Type | PRSXT 2/24V DC | PRSXT 2/24V AC | PRSXT 2/230V DC | PRSXT 2/24V DC |
|--|--|-----------------------|-----------------------|-----------------------|
| Cat. no./Qty. | 16013.2 / 1 | 16014.2 / 1 | 16015.2 / 1 | 16013.2 / 1 |
| Dimensions (L x W x H) | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm |
| Weight | 16g | 16g | 16g | 16g |
| Common data | Insulation IEC 664/VDE 0110, Rated voltage 250 V, contamination degree 3, Overvoltage category III, Flammability class UL 94 V-0 | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, Rated voltage 250 V, contamination degree 3, Overvoltage category III, Flammability class UL 94 V-0 | | | |
| Test voltage coil/contact | 2.5 KV | 2.5 KV | 2.5 KV | 2.5 KV |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C |
| Lockable test button | yes | yes | yes | yes |
| Indicators | red LED | red LED | red LED | red LED |
| Mechanical indicator | yes | yes | yes | yes |
| Free-wheel diode | yes | no | no | yes |
| Input data | | | | |
| Input voltage | 24 V DC | 24V AC | 230V AC | 24 V DC |
| Rated power consumption | 0.4W | 0.76VA | 0.74VA | 0.4W |
| Frequency | - | 50/60 Hz | 50/60 Hz | - |
| Output specifications | | | | |
| Contacts | 2 CO contact | 2 CO contact | 2 CO contact | 2 CO contact |
| Switching voltage/Max. switching voltage | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC |
| Max. continuous current | 8 A, 240 V AC | 8 A, 240 V AC | 8 A, 240 V AC | 8 A, 240 V AC |
| Max. inrush current 4s / 30 ms | 15 A /300 A | 15 A /300 A | 15 A /300 A | 15 A /300 A |
| Max. contact load | 2000 VA | 2000 VA | 2000 VA | 2000 VA |
| Min. suggested contact load | 12V at 10mA | 12V at 10mA | 12V at 10mA | 12V at 10mA |
| Voltage drop | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC |
| Max. switching frequency at operating load | 360 Cycles per hour | 360 Cycles per hour | 360 Cycles per hour | 360 Cycles per hour |
| Max. switching frequency without load | 36000 Cycles per hour | 36000 Cycles per hour | 36000 Cycles per hour | 36000 Cycles per hour |
| Typical response time/release time | 10 ms/5 ms | 10 ms/5 ms | 10 ms/5 ms | 10 ms/5 ms |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 |
| Electrical service life | 50 x 10 ³ | 50 x 10 ³ | 50 x 10 ³ | 50 x 10 ³ |
| Mechanical service life | 10 x 10 ⁶ | 5 x 10 ⁶ | 5 x 10 ⁶ | 10 x 10 ⁶ |

Socket base

| Type | PRS 2 | PRS 2 | PRS 2 | PRS 2 G |
|------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Cat. no./Qty. | 15136.2 / 1 | 15136.2 / 1 | 15136.2 / 1 | 15320.2 / 1 |
| Overview | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in base for | 5mm pinning | 5mm pinning | 5mm pinning | 5mm pinning |
| Connection type | Screw connection | Screw connection | Screw connection | Screw connection |
| Technical data | | | | |
| Rated current | 10A | 10A | 10A | 10A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength | 4000 Veff | 4000 Veff | 4000 Veff | 4000 Veff |
| Insulation group (VDE 0110b) | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25... +80°C | -25... +80°C | -25... +80°C | -25... +80°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² |
| With ferrules | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² |
| Screw torque | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm |
| Stripping length | 7 mm | 7 mm | 7 mm | 7 mm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

Holding clamp

| Type | PRSXT C1/2 | PRSXT C1/2 | PRSXT C1/2 | PRSXT C1/2 |
|---------------|--------------|--------------|--------------|--------------|
| Cat. no./Qty. | 16016.2 / 20 | 16016.2 / 20 | 16016.2 / 20 | 16016.2 / 20 |

| | | | | | |
|---|---|--|--|--|--|
| PRSUXT 2G/24V AC | PRSUXT 2G/230V AC | | | | |
|  |  | | | | |
| PRSUXT 2G/24V AC 16021.2 / 1 | PRSUXT 2G/230V AC 16022.2 / 1 | | | | |
| 76 x 15.7 x 76 mm | 76 x 15.7 x 76 mm | | | | |
| 56g | 56g | | | | |

| | | | | | |
|--|--|--|--|--|--|
| PRSXT 2/24V AC 16014.2 / 1 | PRSXT 2/230V DC 16015.2 / 1 | | | | |
| 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | | | | |
| 16g | 16g | | | | |
| Insulation IEC 664/VDE 0110, Rated voltage 250 V, contamination degree 3, Overvoltage category III, Flammability class UL 94 V-0 | | | | | |
| 2.5 KV | 2.5 KV | | | | |
| -40 to +70°C | -40 to +70°C | | | | |
| yes | yes | | | | |
| red LED | red LED | | | | |
| yes | yes | | | | |
| no | no | | | | |
| 24V AC | 230V AC | | | | |
| 0.76VA | 0.74VA | | | | |
| 50/60 Hz | 50/60 Hz | | | | |
| 2 CO contact | 2 CO contact | | | | |
| 240 V AC/400 V AC | 240 V AC/400 V AC | | | | |
| 8 A, 240 V AC | 8 A, 240 V AC | | | | |
| 15 A /300 A | 15 A /300 A | | | | |
| 2000 VA | 2000 VA | | | | |
| 12V at 10mA | 12V at 10mA | | | | |
| 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | | | | |
| 360 Cycles per hour | 360 Cycles per hour | | | | |
| 36000 Cycles per hour | 36000 Cycles per hour | | | | |
| 10 ms/5 ms | 10 ms/5 ms | | | | |
| AgNi 90/10 | AgNi 90/10 | | | | |
| 50 x 10 ³ | 50 x 10 ³ | | | | |
| 5 x 10 ⁶ | 5 x 10 ⁶ | | | | |

| | | | | | |
|--------------------------------------|--------------------------------------|--|--|--|--|
| PRS 2 G 15320.2 / 1 | PRS 2 G 15320.2 / 1 | | | | |
| TS 35 | TS 35 | | | | |
| 5mm pinning | 5mm pinning | | | | |
| Screw connection | Screw connection | | | | |
| 10A | 10A | | | | |
| 300 V | 300 V | | | | |
| 4000 Veff | 4000 Veff | | | | |
| C/250 V | C/250 V | | | | |
| -25... +80°C | -25... +80°C | | | | |
| IP 20 | IP 20 | | | | |
| V-0 | V-0 | | | | |
| VBG 4 | VBG 4 | | | | |
| 2 x 2.5 mm ² | 2 x 2.5 mm ² | | | | |
| 2 x 1.5 mm ² | 2 x 1.5 mm ² | | | | |
| max. 0.8 Nm | max. 0.8 Nm | | | | |
| 7 mm | 7 mm | | | | |
| UL/CSA | UL/CSA | | | | |

| | | | | | |
|--|--|--|--|--|--|
| PRSXT C1/2 16016.2 / 20 | PRSXT C1/2 16016.2 / 20 | | | | |
|--|--|--|--|--|--|

Relay with 1 CO PRS 1

| Complete screw-connection components | PRSU 1/12 V DC | PRSU 1/24 V DC | PRSU 1/60 V DC | PRSU 1/110 V DC |
|--------------------------------------|-----------------------|-----------------------|-----------------------|------------------------|
| consisting of: | | | | |
| · Relay | | | | |
| · Insert module | | | | |
| · Socket base | | | | |
| · Holding clamp | | | | |
| Type | PRSU 1/12 V DC | PRSU 1/24 V DC | PRSU 1/60 V DC | PRSU 1/110 V DC |
| Cat. no./Qty. | 15163.2/1 | 15169.2/1 | 15720.2/1 | 15721.2/1 |
| Size (L x W x H) with TS 35 x 7.5 | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm |
| Weight | 55 g | 55 g | 55 g | 55 g |

Individual components

Relay 1 W, encapsulated design

| Type | PRS 1/12 V DC | PRS 1/24 V DC | PRS 1/60 V DC | PRS 1/110 V DC |
|--|--|------------------------|------------------------|------------------------|
| Cat. no./Qty. | 6996.0/1 | 6804.0/1 | 15539.2/1 | 15540.2/1 |
| Weight | 15 g | 15 g | 15 g | 15 g |
| General information | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | |
| Test voltage coil/contact | 5 kV | 5 kV | 5 kV | 5 kV |
| Pinning | 3.5mm | 3.5mm | 3.5mm | 3.5mm |
| Operating temperature | -40 to +85°C | -40 to +85°C | -40 to +85°C | -40 to +85°C |
| Important Notes | - | - | - | - |
| Input data | | | | |
| Input voltage | 12 V DC | 24 V DC | 60 V DC | 110 V DC |
| Rated power consumption | 0.40 W | 0.40 W | 0.42 W | 0.42 W |
| Output data | | | | |
| Contacts | 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact |
| Switching voltage/Max. switching voltage | 250 V AC/440 V AC | 250 V AC/440 V AC | 250 V AC/440 V AC | 250 V AC/440 V AC |
| Max continuous current/inrush current | 12 A/25 A | 12 A/25 A | 12 A/25 A | 12 A/25 A |
| Typical response time/release time | 7 ms/3 ms | 7 ms/3 ms | 7 ms/3 ms | 7 ms/3 ms |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 |
| Electrical service life | 1.2 x 10 ³ | 1.2 x 10 ³ | 1.2 x 10 ³ | 1.2 x 10 ³ |
| at contact load | 4 A, 250 V AC | 4 A, 250 V AC | 4 A, 250 V AC | 4 A, 250 V AC |
| Mechanical life span | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ |

Insert module





| Type | PRS LED 24 V DC | PRS LED 24 V DC | PRS LED 110 V DC | PRS LED 110 V DC |
|---|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Cat. no./Qty. | 15141.2/1 | 15141.2/1 | 15422.2/1 | 15422.2/1 |
| protected against polarity reversal in parallel to coil | Status display with free-wheel diode | Status display with free-wheel diode | Status display with free-wheel diode | Status display with free-wheel diode |
| | 12 to 24 V DC | 12 to 24 V DC | 60 to 110 V DC | 60 to 110 V DC |

Socket base

| Type | PRS 1 | PRS 1 | PRS 1 | PRS 1 |
|-------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Cat. no./Qty. | 15135.2/1 | 15135.2/1 | 15135.2/1 | 15135.2/1 |
| General | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in modules for | 3.5 mm pinning | 3.5 mm pinning | 3.5 mm pinning | 3.5 mm pinning |
| Connection type | Screw connection | Screw connection | Screw connection | Screw connection |
| Technical data | | | | |
| Rated current | 12 A | 12 A | 12 A | 12 A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength | 4000 Veff | 4000 Veff | 4000 Veff | 4000 Veff |
| Insulation group (VDE 0110 b) | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25 to +80°C | -25 to +80°C | -25 to +80°C | -25 to +80°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² |
| With ferrules | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² |
| Screw torque | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

Holding clamp

| Type | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 |
|----------------------|------------------|------------------|------------------|------------------|
| Cat. no./Qty. | 15138.2/1 | 15138.2/1 | 15138.2/1 | 15138.2/1 |

| PRSU 1 L/24 V DC | PRSU 1/24 V AC | PRSU 1/115 V AC | PRSU 1/230 V AC | | |
|--|---|---|--|--|--|
|  |  |  |  | | |
| PRSU 1 L/24 V DC 15419.2/1 | PRSU 1/24 V AC 15164.2/1 | PRSU 1/115 V AC 15418.2/1 | PRSU 1/230 V AC 15170.2/1 | | |
| 76 x 15.7 x 71 mm 60 g | 76 x 15.7 x 71 mm 55 g | 76 x 15.7 x 71 mm 55 g | 76 x 15.7 x 71 mm 55 g | | |

| PRS 1 L/24 V DC 6940.0/1 | PRS 1/24 V AC 6480.2/1 | PRS 1/115 V AC 15228.2/1 | PRS 1/230 V AC 6481.2/1 | | |
|-----------------------------|---------------------------|-----------------------------|----------------------------|--|--|
| 15 g | 15 g | 15 g | 15 g | | |

| | | | | | |
|--|------------------------|------------------------|------------------------|--|--|
| Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | | | |
| 4 kV | 5 kV | 5 kV | 5 kV | | |
| 5 mm | 3.5 mm | 3.5 mm | 3.5 mm | | |
| -20 to +50°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | | |
| Inductive loads | - | - | - | | |
| 24 V DC | 24 V AC | 115 V AC | 230 V AC | | |
| 0.50 W | 0.75 VA | 0.75 VA | 0.75 VA | | |
| 1 CO contact | 1 CO contact | 1 CO contact | 1 CO contact | | |
| 250 V AC | 250 V AC/440 V AC | 250 V AC/440 V AC | 250 V AC/440 V AC | | |
| 16 A/80 A (20 ms) | 12 A/25 A | 12 A/25 A | 12 A/25 A | | |
| 10 ms/10 ms | 7 ms/3 ms | 7 ms/3 ms | 7 ms/3 ms | | |
| Ag Sn 02 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | | |
| 1 x 10 ⁵ | 1.2 x 10 ³ | 1.2 x 10 ³ | 1.2 x 10 ³ | | |
| 16 A, 250 V AC | 4 A, 250 V AC | 4 A, 250 V AC | 4 A, 250 V AC | | |
| > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ | | |

| PRS LED 24 V DC 15141.2/1 | PRS LED 24 V UC 15175.2/1 | PRS LED 230 V AC 15142.2/1 | PRS LED 230 V AC 15142.2/1 | | |
|---|------------------------------------|-----------------------------------|-----------------------------------|--|--|
| Status display with free-wheel diode 12 to 24 V DC | Status display 12 to 48 V AC/DC | Status display 110 to 230 V/AC | Status display 110 to 230 V/AC | | |

| PRS 2 15136.2/1 | PRS 1 15135.2/1 | PRS 1 15135.2/1 | PRS 1 15135.2/1 | | |
|-------------------------|-------------------------|-------------------------|-------------------------|--|--|
| TS 35 | TS 35 | TS 35 | TS 35 | | |
| 5 mm pinning | 3.5 mm pinning | 3.5 mm pinning | 3.5 mm pinning | | |
| Screw connection | Screw connection | Screw connection | Screw connection | | |
| 10 A | 12 A | 12 A | 12 A | | |
| 300 V | 300 V | 300 V | 300 V | | |
| 4000 Veff | 4000 Veff | 4000 Veff | 4000 Veff | | |
| C/250 V | C/250 V | C/250 V | C/250 V | | |
| -25 to +80°C | -25 to +80°C | -25 to +80°C | -25 to +80°C | | |
| IP 20 | IP 20 | IP 20 | IP 20 | | |
| V-0 | V-0 | V-0 | V-0 | | |
| VBG 4 | VBG 4 | VBG 4 | VBG 4 | | |
| 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | | |
| 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | | |
| max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | | |
| UL/CSA | UL/CSA | UL/CSA | UL/CSA | | |

| PRS C 1/2 15138.2/1 | PRS C 1/2 15138.2/1 | PRS C 1/2 15138.2/1 | PRS C 1/2 15138.2/1 | | |
|------------------------|------------------------|------------------------|------------------------|--|--|
|------------------------|------------------------|------------------------|------------------------|--|--|

Relay with 2 CO PRS 2

| Complete screw-connection components | PRSU 2/12 V DC | PRSU 2/24 V DC | PRSU 2/48 V DC | PRSU 2/60 V DC |
|--------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| consisting of: | | | | |
| · Relay | | | | |
| · Insert module | | | | |
| · Socket base | | | | |
| · Holding clamp | | | | |
| Type | PRSU 2/12 V DC | PRSU 2/24 V DC | PRSU 2/48 V DC | PRSU 2/60 V DC |
| Cat. no./Qty. | 15165.2/1 | 15171.2/1 | 15411.2/1 | 15412.2/1 |
| Size (L x W x H) with TS 35 x 7.5 | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm |
| Weight | 60 g | 60 g | 60 g | 60 g |

Individual components

Relay 2 W, encapsulated design

| Type | PRS 2/12 V DC | PRS 2/24 V DC | PRS 2/48 V DC | PRS 2/60 V DC |
|--|--|------------------------|------------------------|------------------------|
| Cat. no./Qty. | 6482.2/1 | 6483.2/1 | 15334.2/1 | 15335.2/1 |
| Weight | 15 g | 15 g | 15 g | 15 g |
| General information | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | |
| Test voltage coil/contact | 5 kV | 5 kV | 5 kV | 5 kV |
| Pinning | 5 mm | 5 mm | 5 mm | 5 mm |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C |
| Input data | | | | |
| Input voltage | 12 V DC | 24 V DC | 48 V DC | 60 V DC |
| Rated power consumption | 0.40 W | 0.40 W | 0.40 W | 0.40 W |
| Output data | | | | |
| Contacts | 2 CO contact | 2 CO contact | 2 CO contact | 2 CO contact |
| Switching voltage/Max. switching voltage | 250 V AC/440 V AC | 250 V AC/440 V AC | 250 V AC/440 V AC | 250 V AC/440 V AC |
| Max continuous current/inrush current | 8 A/15 A | 8 A/15 A | 12 A/25 A | 8 A/15 A |
| Typical response time/release time | 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 |
| Electrical service life | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ |
| at contact load | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC |
| Mechanical life span | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ |

Insert module



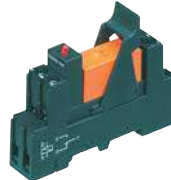

| Type | PRS LED 24 V DC | PRS LED 24 V DC | PRS LED 24 V UC | PRS LED 110 V DC |
|---|---|---|------------------------------------|--|
| Cat. no./Qty. | 15141.2/1 | 15141.2/1 | 15175.2/1 | 15422.2/1 |
| protected against polarity reversal in parallel to coil | Status display with free-wheel diode 12 to 24 V DC | Status display with free-wheel diode 12 to 24 V DC | Status display 12 to 48 V AC/DC | Status display with free-wheel diode 60 to 110 V DC |

Socket base

| Type | PRS 2 | PRS 2 | PRS 2 | PRS 2 |
|-------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Cat. no./Qty. | 15136.2/1 | 15136.2/1 | 15136.2/1 | 15136.2/1 |
| General | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in modules for | 5 mm pinning | 5 mm pinning | 5 mm pinning | 5 mm pinning |
| Connection type | Screw connection | Screw connection | Screw connection | Screw connection |
| Technical data | | | | |
| Rated current | 10 A | 10 A | 10 A | 10 A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength | 4000 Veff | 4000 Veff | 4000 Veff | 4000 Veff |
| Insulation group (VDE 0110 b) | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25 to +80°C | -25 to +80°C | -25 to +80°C | -25 to +80°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² |
| With ferrules | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² |
| Screw torque | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

Holding clamp

| Type | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 |
|----------------------|------------------|------------------|------------------|------------------|
| Cat. no./Qty. | 15138.2/1 | 15138.2/1 | 15138.2/1 | 15138.2/1 |

| | | | | | |
|---|---|---|--|--|--|
| PRSU 2/110 V DC | PRSU 2/24 V AC | PRSU 2/115 V AC | PRSU 2/230 V AC | | |
|  |  |  |  | | |
| PRSU 2/110 V DC 15722.2/1 | PRSU 2/24 V AC 15166.2/1 | PRSU 2/115 V AC 15413.2/1 | PRSU 2/230 V AC 15172.2/1 | | |
| 76 x 15.7 x 71 mm 60 g | 76 x 15.7 x 71 mm 60 g | 76 x 15.7 x 71 mm 60 g | 76 x 15.7 x 71 mm 60 g | | |

| | | | | | |
|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|--|--|
| PRS 2/110 V DC 15541.2/1 | PRS 2/24 V AC 6484.2 /1 | PRS 2/115 V AC 15229.2/1 | PRS 2/230 V AC 6485.2/1 | | |
| 15 g | 15 g | 15 g | 15 g | | |

| | | | | | |
|--|---|---|---|--|--|
| Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | | | |
| 5 kV | 5 kV | 5 kV | 5 kV | | |
| 5 mm | 5 mm | 5 mm | 5 mm | | |
| -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | | |
| 110 V DC 0.40 W | 24 V AC 0.75 VA | 115 V AC 0.75 VA | 230 V AC 0.75 VA | | |
| 2 CO contact 250 V AC/440 V AC 8 A/15 A 7 ms/2 ms AgNi 90/10 1.5 x 10 ⁵ 4 A, 230 V AC > 30 x 10 ⁶ | 2 CO contact 250 V AC/440 V AC 8 A/15 A 7 ms/2 ms AgNi 90/10 1.5 x 10 ⁵ 4 A, 230 V AC > 5 x 10 ⁶ | 2 CO contact 250 V AC/440 V AC 8 A/15 A 7 ms/2 ms AgNi 90/10 1.5 x 10 ⁵ 4 A, 230 V AC > 5 x 10 ⁶ | 2 CO contact 250 V AC/440 V AC 8 A/15 A 7 ms/2 ms AgNi 90/10 1.5 x 10 ⁵ 4 A, 230 V AC > 5 x 10 ⁶ | | |

| | | | | | |
|--|--------------------------------------|---------------------------------------|---------------------------------------|--|--|
| PRS LED 110 V DC 15422.2 /1 | PRS LED 24 V UC 15175.2/1 | PRS LED 230 V AC 15142.2/1 | PRS LED 230 V AC 15142.2/1 | | |
| Status display with free-wheel diode 60 to 110 V DC | Status display 12 to 48 V AC/DC | Status display 110 to 230 V AC/DC | Status display 110 to 230 V AC/DC | | |

| | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|--|--|
| PRS 2 15136.2/1 | PRS 2 15136.2/1 | PRS 2 15136.2/1 | PRS 2 15136.2/1 | | |
| TS 35 | TS 35 | TS 35 | TS 35 | | |
| 5 mm pinning | 5 mm pinning | 5 mm pinning | 5 mm pinning | | |
| Screw connection | Screw connection | Screw connection | Screw connection | | |
| 10 A | 10 A | 10 A | 10 A | | |
| 300 V | 300 V | 300 V | 300 V | | |
| 4000 Veff | 4000 Veff | 4000 Veff | 4000 Veff | | |
| C/250 V | C/250 V | C/250 V | C/250 V | | |
| -25 to +80°C | -25 to +80°C | -25 to +80°C | -25 to +80°C | | |
| IP 20 | IP 20 | IP 20 | IP 20 | | |
| V-0 | V-0 | V-0 | V-0 | | |
| VBG 4 | VBG 4 | VBG 4 | VBG 4 | | |
| 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | | |
| 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | | |
| max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | | |
| UL/CSA | UL/CSA | UL/CSA | UL/CSA | | |

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--|--|
| PRS C 1/2 15138.2/1 | PRS C 1/2 15138.2/1 | PRS C 1/2 15138.2/1 | PRS C 1/2 15138.2/1 | | |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--|--|

Relay 2 CO contact, PRS 2 G

Complete screw-connection components

- consisting of:
- Relay
 - Insert module
 - Socket base
 - Holding clamp

PRS 2 G/12 V DC



PRS 2 G/24 V DC



PRS 2 G/48 V DC



PRS 2 G/60 V DC



| Type | PRS 2 G/12 V DC | PRS 2 G/24 V DC | PRS 2 G/48 V DC | PRS 2 G/60 V DC |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|
| Cat. no./Qty. | 15414.2/1 | 15233.2/1 | 15415.2/1 | 15416.2/1 |
| Size (L x W x H) with TS 35 | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm | 76 x 15.7 x 71 mm |
| Weight | 60 g | 60 g | 60 g | 60 g |

Individual components

Relay 2 W, encapsulated design

| Type | PRS 2/12 V DC | PRS 2/24 V DC | PRS 2/48 V DC | PRS 2/60 V DC |
|--|--|------------------------|------------------------|------------------------|
| Cat. no./Qty. | 6482.2/1 | 6483.2/1 | 15334.2/1 | 15335.2/1 |
| Weight | 15 g | 15 g | 15 g | 15 g |
| General information | | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | |
| Test voltage coil/contact | 5 kV | 5 kV | 5 kV | 5 kV |
| Pinning | 5 mm | 5 mm | 5 mm | 5 mm |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C |
| Input data | | | | |
| Input voltage | 12 V DC | 24 V DC | 48 V DC | 60 V DC |
| Rated power consumption | 0.40 W | 0.40 W | 0.40 W | 0.40 W |
| Output data | | | | |
| Contacts | 2 CO contact | 2 CO contact | 2 CO contact | 2 CO contact |
| Switching voltage/Max. switching voltage | 250 V AC/440 V AC | 250 V AC/440 V AC | 250 V AC/440 V AC | 250 V AC/440 V AC |
| Max continuous current/inrush current | 8 A/15 A | 8 A/15 A | 8 A/15 A | 8 A/15 A |
| Typical response time/release time | 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 |
| Electrical service life at contact load | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ |
| Mechanical life span | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ |

Insert module

| Type | PRS LED 24 V DC | PRS LED 24 V DC | PRS LED 24 V UC | PRS LED 110 V DC |
|---|---|---|------------------------------------|--|
| Cat. no./Qty. | 15141.2/1 | 15141.2/1 | 15175.2/1 | 15422.2/1 |
| protected against polarity reversal in parallel to coil | Status display with free-wheel diode 12 to 24 V DC | Status display with free-wheel diode 12 to 24 V DC | Status display 12 to 48 V AC/DC | Status display with free-wheel diode 60 to 110 V DC |

Socket base

| Type | PRS 2 G | PRS 2 G | PRS 2 G | PRS 2 G |
|-------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Cat. no./Qty. | 15320.2/1 | 15320.2/1 | 15320.2/1 | 15320.2/1 |
| General | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in modules for | 5 mm pinning | 5 mm pinning | 5 mm pinning | 5 mm pinning |
| Connection type | Screw connection | Screw connection | Screw connection | Screw connection |
| Technical data | | | | |
| Rated current | 10 A | 10 A | 10 A | 10 A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength | 4000 Veff | 4000 Veff | 4000 Veff | 4000 Veff |
| Insulation group (VDE 0110 b) | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25 to +80°C | -25 to +80°C | -25 to +80°C | -25 to +80°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² |
| With ferrules | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² |
| Screw torque | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

Holding clamp

| Type | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 |
|---------------|-----------|-----------|-----------|-----------|
| Cat. no./Qty. | 15138.2/1 | 15138.2/1 | 15138.2/1 | 15138.2/1 |

| | | | | | |
|--|---|---|--|--|--|
| PRSU 2 G/110 V DC | PRSU 2 G/24 V AC | PRSU 2 G/115 V AC | PRSU 2 G/230 V AC | | |
|  |  |  |  | | |
| PRSU 2 G/110 V DC 15723.2/1 | PRSU 2 G/24 V AC 15385.2/1 | PRSU 2 G/115 V AC 15417.2/1 | PRSU 2 G/230 V AC 15236.2/1 | | |
| 76 x 15.7 x 71 mm 60 g | 76 x 15.7 x 71 mm 60 g | 76 x 15.7 x 71 mm 60 g | 76 x 15.7 x 71 mm 60 g | | |

| | | | | | |
|---|---|---|--|--|--|
| PRS 2/110 V DC 15441.2/1 | PRS 2/24 V AC 6484.2/1 | PRS 2/115 V AC 15229.2/1 | PRS 2/230 V AC 6485.2/1 | | |
| 15 g | 15 g | 15 g | 15 g | | |

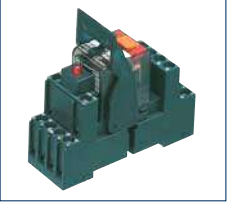
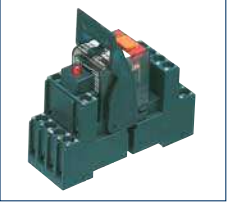
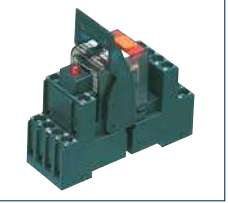
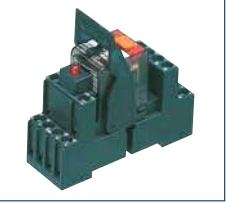
| | | | | | |
|--|---|---|---|--|--|
| Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | | | |
| 5 kV | 5 kV | 5 kV | 5 kV | | |
| 5 mm | 5 mm | 5 mm | 5 mm | | |
| -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | | |
| 110 V DC 0.40 W | 24 V DC 0.75 VA | 115 V DC 0.75 VA | 230 V AC 0.75 VA | | |
| 2 CO contact 250 V AC/440 V AC 8 A/15 A 7 ms/2 ms AgNi 90/10 1.5 x 10 ⁵ 4 A, 230 V AC > 30 x 10 ⁶ | 2 CO contact 250 V AC/440 V AC 8 A/15 A 7 ms/2 ms AgNi 90/10 1.5 x 10 ⁵ 4 A, 230 V AC > 5 x 10 ⁶ | 2 CO contact 250 V AC/440 V AC 8 A/15 A 7 ms/2 ms AgNi 90/10 1.5 x 10 ⁵ 4 A, 230 V AC > 5 x 10 ⁶ | 2 CO contact 250 V AC/440 V AC 8 A/15 A 7 ms/2 ms AgNi 90/10 1.5 x 10 ⁵ 4 A, 230 V AC > 5 x 10 ⁶ | | |

| | | | | | |
|--|--|---|---|--|--|
| PRS LED 110 V DC 15422.2/1 | PRS LED 24 V AC 15175.2/1 | PRS LED 230 V AC 15142.2/1 | PRS LED 230 V AC 15142.2/1 | | |
| Status display with free-wheel diode 60 to 110 V DC | Status display 12 to 48 V AC/DC | Status display 110 to 230 V AC | Status display 110 to 230 V AC | | |

| | | | | | |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--|--|
| PRS 2 G 15320.2/1 | PRS 2 G 15320.2/1 | PRS 2 G 15320.2/1 | PRS 2 G 15320.2/1 | | |
| TS 35 | TS 35 | TS 35 | TS 35 | | |
| 5 mm pinning | 5 mm pinning | 5 mm pinning | 5 mm pinning | | |
| Screw connection | Screw connection | Screw connection | Screw connection | | |
| 10 A | 10 A | 10 A | 10 A | | |
| 300 V | 300 V | 300 V | 300 V | | |
| 4000 Veff | 4000 Veff | 4000 Veff | 4000 Veff | | |
| C/250 V | C/250 V | C/250 V | C/250 V | | |
| -25 to +80°C | -25 to +80°C | -25 to +80°C | -25 to +80°C | | |
| IP 20 | IP 20 | IP 20 | IP 20 | | |
| V-0 | V-0 | V-0 | V-0 | | |
| VBG 4 | VBG 4 | VBG 4 | VBG 4 | | |
| 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | | |
| 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | | |
| max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | | |
| UL/CSA | UL/CSA | UL/CSA | UL/CSA | | |

| | | | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|--|
| PRS C 1/2 15138.2/1 | PRS C 1/2 15138.2/1 | PRS C 1/2 15138.2/1 | PRS C 1/2 15138.2/1 | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|--|

Relay with 4 CO PRS 4

| Complete screw-connection components | PRSU 4/12 V DC | PRSU 4/24 V DC | PRSU 4/48 V DC | PRSU 4/60 V DC |
|--------------------------------------|---|-----------------------|-----------------------|-----------------------|
| consisting of: |  | | | |
| · Relay |  | | | |
| · Insert module |  | | | |
| · Socket base |  | | | |
| · Holding clamp | | | | |
| Type | PRSU 4/12 V DC | PRSU 4/24 V DC | PRSU 4/48 V DC | PRSU 4/60 V DC |
| Cat. no./Qty. | 15167.2/1 | 15173.2/1 | 15724.2/1 | 15725.2/1 |
| Size (L x W x H) with TS 35 x 7.5 | 76 x 27.1 x 85 mm | 76 x 27.1 x 85 mm | 76 x 27.1 x 85 mm | 76 x 27.1 x 85 mm |
| Weight | 95 g | 95 g | 95 g | 95 g |

Individual components

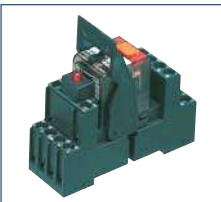
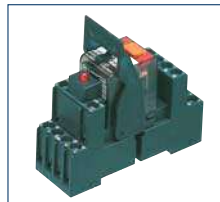
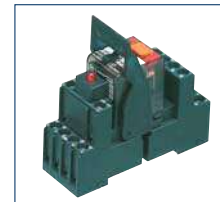
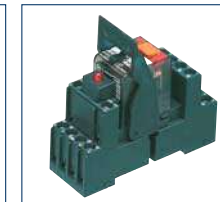
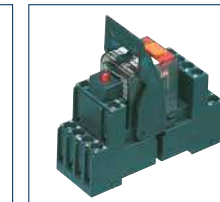
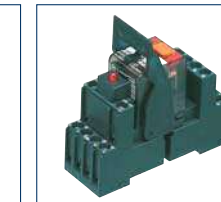
Relay 4 W, open design, with switch

| Type | PRS 4/12 V DC | PRS 4/24 V DC | PRS 4/48 V DC | PRS 4/60 V DC |
|--|--|------------------------|------------------------|------------------------|
| Cat. no./Qty. | 6486.2/1 | 6487.2/1 | 15461.2/1 | 15336.2/1 |
| Weight | 30 g | 30 g | 30 g | 30 g |
| General information | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III | | | |
| DIN-VDE specifications | | | | |
| Test voltage coil/contact | 2.5 kV | 2.5 kV | 2.5 kV | 2.5 kV |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C |
| Input data | | | | |
| Input voltage | 12 V DC | 24 V DC | 48 V DC | 60 V DC |
| Rated power consumption | 0.75 W | 0.75 W | 0.75 W | 0.75 W |
| Output data | | | | |
| Contacts | 4 CO contact | 4 CO contact | 4 CO contact | 4 CO contact |
| Switching voltage/Max. switching voltage | 250 V AC/250 V AC | 250 V AC/250 V AC | 250 V AC/250 V AC | 250 V AC/250 V AC |
| Max continuous current/inrush current | 6 A/12 A | 6 A/12 A | 6 A/12 A | 6 A/12 A |
| Typical response time/release time | 15 ms/10 ms | 15 ms/10 ms | 15 ms/10 ms | 15 ms/10 ms |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 |
| Electrical service life | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ |
| at contact load | 6 A, 250 V AC | 6 A, 250 V AC | 6 A, 250 V AC | 6 A, 250 V AC |
| Mechanical life span | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ |

| Insert module | PRS LED 24 V DC | PRS LED 24 V DC | PRS LED 24 V UC | PRS LED 110 V DC |
|---|--------------------------------------|--------------------------------------|------------------------|--------------------------------------|
| Type | PRS LED 24 V DC | PRS LED 24 V DC | PRS LED 24 V UC | PRS LED 110 V DC |
| Cat. no./Qty. | 15141.2/1 | 15141.2/1 | 15175.2/1 | 15422.2/1 |
| protected against polarity reversal in parallel to coil | Status display with free-wheel diode | Status display with free-wheel diode | Status display | Status display with free-wheel diode |
| | 12 to 24 V DC | 12 to 24 V DC | 12 to 48 V AC/DC | 60 to 110 V DC |

| Socket base | PRS 4 | PRS 4 | PRS 4 | PRS 4 |
|-------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Type | PRS 4 | PRS 4 | PRS 4 | PRS 4 |
| Cat. no./Qty. | 15137.2/1 | 15137.2/1 | 15137.2/1 | 15137.2/1 |
| General | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in modules for | 2.8mm fast-on | 2.8 mm fast-on | 2.8mm fast-on | 2.8mm fast-on |
| Connection type | Screw connection | Screw connection | Screw connection | Screw connection |
| Technical data | | | | |
| Rated current | 10 A | 10 A | 10 A | 10 A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength | 2400 Veff | 2400 Veff | 2400 Veff | 2400 Veff |
| Insulation group (VDE 0110 b) | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25 to +80°C | -25 to +80°C | -25 to +80°C | -25 to +80°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² |
| With ferrules | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² |
| Screw torque | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

| Holding clamp | PRS C 4 | PRS C 4 | PRS C 4 | PRS C 4 |
|----------------------|------------------|------------------|------------------|------------------|
| Type | PRS C 4 | PRS C 4 | PRS C 4 | PRS C 4 |
| Cat. no./Qty. | 15140.2/1 | 15140.2/1 | 15140.2/1 | 15140.2/1 |

| | | | | | |
|--|---|---|--|---|---|
| PRSU 4/110 V DC | PRSU 4/220 V DC | PRSU 4/12 V AC | PRSU 4/24 V AC | PRSU 4/115 V AC | PRSU 4/230 V AC |
|  |  |  |  |  |  |
| PRSU 4/110 V DC 15726.2/1 | PRSU 4/220 V DC 15727.2/1 | PRSU 4/12 V AC 15392.2/1 | PRSU 4/24 V AC 15168.2/1 | PRSU 4/115 V AC 15728.2/1 | PRSU 4/230 V AC 15174.2/1 |
| 76 x 27.1 x 85 mm 95 g | 76 x 27.1 x 85 mm 95 g | 76 x 27.1 x 85 mm 95 g | 76 x 27.1 x 85 mm 95 g | 76 x 27.1 x 85 mm 95 g | 76 x 27.1 x 85 mm 95 g |

| | | | | | |
|---|---|--|---|---|--|
| PRS 4/110 V DC 15542.2/1 | PRS 4/220 V DC 15368.2/1 | PRS 4/12 V AC 15393.2/1 | PRS 4/24 V AC 6488.2/1 | PRS 4/115 V AC 15257.2/1 | PRS 4/230 V AC 6489.2/1 |
| 30 g | 30 g | 30 g | 30 g | 30 g | 30 g |

| | | | | | |
|--|---|---|---|--|--|
| Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III | | | | | |
| 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C |
| 110 V DC 0.75 W | 220 V DC 0.75 W | 12 V AC 1.0 VA | 24 V AC 1.0 VA | 115 V AC 1.0 VA | 230 V AC 1.0 VA |
| 4 CO contact 250 V/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V A > 30 x 10 ⁶ | 4 CO contact 250 V/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 30 x 10 ⁶ | 4 CO contact 250 V/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 20 x 10 ⁶ | 4 CO contact 250 V/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 20 x 10 ⁶ | 4 CO contact 250 V AC/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 20 x 10 ⁶ | 4 CO contact 250 V AC/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 20 x 10 ⁶ |

| | | | | | |
|--|---|--|--|---|---|
| PRS LED 110 V DC 15422.2/1 | PRS LED 230 V AC 15142.2/1 | PRS LED 24 V UC 15175.2/1 | PRS LED 24 V UC 15175.2/1 | PRS LED 230 V AC 15142.2/1 | PRS LED 230 V AC 15142.2/1 |
| Status display with free-wheel diode 60 to 110 V DC | Status display 110 to 230 V DC | Status display 12 to 48 V AC/DC | Status display 12 to 48 V AC/DC | Status display 110 to 230 V AC/DC | Status display 110 to 230 V AC |

| | | | | | |
|---|---|---|---|---|---|
| PRS 4 15137.2/1 | PRS 4 15137.2/1 | PRS 4 15137.2/1 | PRS 4 15137.2/1 | PRS 4 15137.2/1 | PRS 4 15137.2/1 |
| TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection |
| 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5mm ² 2 x 1.5mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5mm ² 2 x 1.5mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5mm ² 2 x 1.5mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5mm ² 2 x 1.5mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5mm ² 2 x 1.5mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5mm ² 2 x 1.5mm ² max. 0.8 Nm UL/CSA |

| | | | | | |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|

Relay 4 CO contact, PRS 4 G

Complete screw-connection components

- consisting of:
- Relay
 - Insert module
 - Socket base
 - Holding clamp

PRSU 4 G/12 V DC



PRSU 4 G/24 V DC



PRSU 4 G/48 V DC



PRSU 4 G/60 V DC



| Type | PRSU 4 G/12 V DC | PRSU 4 G/24 V DC | PRSU 4 G/48 V DC | PRSU 4 G/60 V DC |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|
| Cat. no./Qty. | 15421.2/1 | 15332.2/1 | 15729.2/1 | 15730.2/1 |
| Size (L x W x H) with TS 35 x 7.5 | 76 x 27.1 x 87 mm | 76 x 27.1 x 87 mm | 76 x 27.1 x 87 mm | 76 x 27.1 x 87 mm |
| Weight | 95 g | 95 g | 95 g | 95 g |

Individual components

Relay 4 W, open design, with switch

| Type | PRS 4/12 V DC | PRS 4/24 V DC | PRS 4/48 V DC | PRS 4/60 V DC |
|--|--|---------------|---------------|---------------|
| Cat. no./Qty. | 6486.2/1 | 6487.2/1 | 15461.2/1 | 15336.2/1 |
| Weight | 30 g | 30 g | 30 g | 30 g |
| General information | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III | | | |
| DIN-VDE specifications | 2.5 kV | | | |
| Test voltage coil/contact | -40 to +70°C | | | |
| Operating temperature | -40 to +70°C | | | |
| Input data | 12 V DC | | | |
| Input voltage | 24 V DC | | | |
| Rated power consumption | 0.75 W | | | |
| Output data | 4 CO contact | | | |
| Contacts | 250 V AC/250 V AC | | | |
| Switching voltage/Max. switching voltage | 6 A/12 A | | | |
| Max continuous current/inrush current | 15 ms/10 ms | | | |
| Typical response time/release time | AgNi 90/10 | | | |
| Contact material | 1.5 x 10 ⁵ | | | |
| Electrical service life | 6 A, 250 V AC | | | |
| at contact load | > 30 x 10 ⁶ | | | |
| Mechanical life span | > 30 x 10 ⁶ | | | |

Insert module







| Type | PRS LED 24 V DC | PRS LED 24 V DC | PRS LED 24 V UC | PRS LED 110 V DC |
|---|--------------------------------------|--------------------------------------|------------------|--------------------------------------|
| Cat. no./Qty. | 15141.2/1 | 15141.2/1 | 15175.2/1 | 15422.2/1 |
| protected against polarity reversal in parallel to coil | Status display with free-wheel diode | Status display with free-wheel diode | Status display | Status display with free-wheel diode |
| | 12 to 24 V DC | 12 to 24 V DC | 12 to 48 V AC/DC | 60 to 110 V DC |

Socket base

| Type | PRS 4 G | PRS 4 G | PRS 4 G | PRS 4 G |
|-------------------------------|-------------------------|-----------|-----------|-----------|
| Cat. no./Qty. | 15324.2/1 | 15324.2/1 | 15324.2/1 | 15324.2/1 |
| General | TS 35 | | | |
| Mounting foot for DIN rails | 2.8mm fast-on | | | |
| Plug-in modules for | Screw connection | | | |
| Connection type | Screw connection | | | |
| Technical data | 10 A | | | |
| Rated current | 300 V | | | |
| Rated voltage | 2400 Veff | | | |
| Dielectric strength | C/250 V | | | |
| Insulation group (VDE 0110 b) | -25 to +80°C | | | |
| Ambient temperature | IP 20 | | | |
| Protection degree, enclosure | V-0 | | | |
| Flammability class UL 94 | VBG 4 | | | |
| Touch protection, acc. to | 2 x 2.5 mm ² | | | |
| Connection cross-section | 2 x 1.5 mm ² | | | |
| With ferrules | max. 0.8 Nm | | | |
| Screw torque | UL/CSA | | | |
| Approvals | UL/CSA | | | |

Holding clamp

| Type | PRS C 4 | PRS C 4 | PRS C 4 | PRS C 4 |
|---------------|-----------|-----------|-----------|-----------|
| Cat. no./Qty. | 15140.2/1 | 15140.2/1 | 15140.2/1 | 15140.2/1 |

| | | | | | |
|--|---|---|--|---|---|
| PRSU 4 G/110 V DC | PRSU 4 G/220 V DC | PRSU 4 G/12 V AC | PRSU 4 G/24 V AC | PRSU 4 G/115 V AC | PRSU 4 G/230 V AC |
|  |  |  |  |  |  |
| PRSU 4 G/110 V DC 15731.2/1 | PRSU 4 G/220 V DC 15732.2/1 | PRSU 4 G/12 V AC 15420.2/1 | PRSU 4 G/24 V AC 15371.2/1 | PRSU 4 G/115 V AC 15733.2/1 | PRSU 4 G/230 V AC 15372.2/1 |
| 76 x 27.1 x 87 mm 95 g | 76 x 27.1 x 87 mm 95 g | 76 x 27.1 x 87 mm 95 g | 76 x 27.1 x 87 mm 95 g | 76 x 27.1 x 87 mm 95 g | 76 x 27.1 x 87 mm 95 g |

| | | | | | |
|-------------------------------------|-------------------------------------|------------------------------------|-----------------------------------|-------------------------------------|------------------------------------|
| PRS 4/110 V DC 15442.2/1 | PRS 4/220 V DC 15368.2/1 | PRS 4/12 V AC 15393.2/1 | PRS 4/24 V AC 6488.2/1 | PRS 4/115 V AC 15257.2/1 | PRS 4/230 V AC 6489.2/1 |
| 30 g | 30 g | 30 g | 30 g | 30 g | 30 g |

| | | | | | |
|--|--|--|--|--|--|
| Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III | | | | | |
| 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C |
| 110 V DC 0.75 W | 220 V DC 0.75 W | 12 V AC 1.0 VA | 24 V AC 1.0 VA | 115 V AC 1.0 VA | 230 V AC 1.0 VA |
| 4 CO contact 250 V AC/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 30 x 10 ⁶ | 4 CO contact 250 V AC/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 30 x 10 ⁶ | 4 CO contact 250 V AC/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 20 x 10 ⁶ | 4 CO contact 250 V AC/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 20 x 10 ⁶ | 4 CO contact 250 V AC/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 20 x 10 ⁶ | 4 CO contact 250 V AC/250 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 250 V AC > 20 x 10 ⁶ |

| | | | | | |
|--|---------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|---------------------------------------|
| PRS LED 110 V DC 15422.2/1 | PRS LED 230 V AC 15142.2/1 | PRS LED 24 V UC 15175.2/1 | PRS LED 24 V UC 15175.2/1 | PRS LED 230 V AC 15142.2/1 | PRS LED 230 V AC 15142.2/1 |
| Status display with free-wheel diode 60 to 110 V DC | Status display 110 to 230 V AC | Status display 12 to 48 V AC/DC | Status display 12 to 48 V AC/DC | Status display 110 to 230 V AC | Status display 110 to 230 V AC |

| | | | | | |
|---|---|---|---|---|---|
| PRS 4 G 15324.2/1 | PRS 4 G 15324.2/1 | PRS 4 G 15324.2/1 | PRS 4 G 15324.2/1 | PRS 4 G 15324.2/1 | PRS 4 G 15324.2/1 |
| TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection | TS 35 2.8mm fast-on Screw connection |
| 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5 mm ² 2 x 1.5 mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5 mm ² 2 x 1.5 mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5 mm ² 2 x 1.5 mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5 mm ² 2 x 1.5 mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5 mm ² 2 x 1.5 mm ² max. 0.8 Nm UL/CSA | 10 A 300 V 2400 Veff C/250 V -25 to +80°C IP 20 V-0 VBG 4 2 x 2.5 mm ² 2 x 1.5 mm ² max. 0.8 Nm UL/CSA |

| | | | | | |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|

Relay 4 CO PRS 4 eco

Complete screw or tension-spring connection unit

consisting of:

- Relay
- Socket base

| Type | PRSU 4/24V DC eco | PRSU 4/24V AC eco | PRSU 4/230V AC eco | PRSU 4G/24V DC eco |
|-----------------------------------|-------------------|-------------------|--------------------|--------------------|
| Cat. no./Qty. | 15619.2 / 1 | 15620.2 / 1 | 15621.2 / 1 | 15622.2 / 1 |
| Size (L x W x H) with TS 35 x 7.5 | 76 x 27.1 x 68 mm | 76 x 27.1 x 68 mm | 76 x 27.1 x 68 mm | 78 x 27.1 x 70 mm |
| Weight | 98g | 98g | 98g | 100g |

Individual components

Relay 4W, open design, with switch and status display

| Type | PRS 4/24V DC eco | PRS 4/24V AC eco | PRS 4/230V AC eco | PRS 4/24V DC eco |
|---------------|------------------|------------------|-------------------|------------------|
| Cat. no./Qty. | 15591.2 / 1 | 15592.2 / 1 | 15593.2 / 1 | 15591.2 / 1 |
| Weight | 35g | 35g | 35g | 35g |

Common data

| | | | | |
|--|--|-----------------------|-----------------------|-----------------------|
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, Rated voltage 250V, contamination degree 2, overvoltage category III, | | | |
| Test voltage coil/contact | 2.5 KV | 2.5 KV | 2.5 KV | 2.5 KV |
| Operating temperature | -25 °C to +70°C | -25 to +55°C | -25 to +55°C | -25 °C to +70°C |
| Lockable test button | yes | yes | yes | yes |
| Indicators | red LED | red LED | red LED | red LED |
| Mechanical indicator | yes | yes | yes | yes |
| Free-wheel diode | yes | no | no | yes |
| Input data | | | | |
| Input voltage | 24 V DC | 24V AC | 230V AC | 24 V DC |
| Rated power consumption | 0.9 W | 1.6 VA | 1.6 VA | 0.9 W |
| Frequency | - | 50/60 Hz | 50/60 Hz | - |
| Output specifications | | | | |
| Contacts | 4 CO contact | 4 CO contact | 4 CO contact | 4 CO contact |
| Max. switching voltage AC / DC | 250 V /250 V | 250 V /250 V | 250 V /250 V | 250 V /250 V |
| Min. switching voltage | 5 V | 5 V | 5 V | 5 V |
| Max. continuous current | 6 A, 250 V AC | 6 A, 250 V AC | 6 A, 250 V AC | 6 A, 250 V AC |
| | DC 1 | 6 A / 24 V DC | 6 A / 24 V DC | 6 A / 24 V DC |
| Max inrush current | 12 A | 12 A | 12 A | 12 A |
| Contact load | AC 1 | 1500VA | 1500VA | 1500VA |
| Min. contact load | 0.3W | 0.3W | 0.3W | 0.3W |
| Contact resistance | ≤ 100 mΩ | ≤ 100 mΩ | ≤ 100 mΩ | ≤ 100 mΩ |
| Max. switching frequency at operating load | 1200 Cycles per hour | 1200 Cycles per hour | 1200 Cycles per hour | 1200 Cycles per hour |
| Max. switching frequency without load | 18000 Cycles per hour | 18000 Cycles per hour | 18000 Cycles per hour | 18000 Cycles per hour |
| Typical response time/release time | 13 ms / 3 ms | 13 ms / 3 ms | 13 ms / 3 ms | 13 ms / 3 ms |
| Contact material | AgNi | AgNi | AgNi | AgNi |
| Electrical service life | AC 1 | ≥ 1 x 10 ⁵ | ≥ 1 x 10 ⁵ | ≥ 1 x 10 ⁵ |
| Mechanical service life | ≥ 2 x 10 ⁷ | ≥ 2 x 10 ⁷ | ≥ 2 x 10 ⁷ | ≥ 2 x 10 ⁷ |

Socket base

| Type | PRS 4 | PRS 4 | PRS 4 | PRS 4 G |
|------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Cat. no./Qty. | 15137.2 / 1 | 15137.2 / 1 | 15137.2 / 1 | 15324.2 / 1 |
| Overview | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in base for | 2.8mm fast-on | 2.8mm fast-on | 2.8mm fast-on | 2.8mm fast-on |
| Connection type | Screw connection | Screw connection | Screw connection | Screw connection |
| Technical data | | | | |
| Rated current | 10 A | 10 A | 10 A | 10 A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength | 2400 Veff | 2400 Veff | 2400 Veff | 2400 Veff |
| Insulation group (VDE 0110b) | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25 °C to +80°C | -25 °C to +80°C | -25 °C to +80°C | -25 °C to +80°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 2.5 mm ² |
| With ferrules | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 1.5 mm ² |
| Screw torque | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm | max. 0.8 Nm |
| Stripping length | 7 mm | 7 mm | 7 mm | 7 mm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

Accessory: Holding clamp (optional)

| Type | PRS C4 eco | PRS C4 eco | PRS C4 eco | PRS C4 eco |
|---------------|-------------|-------------|-------------|-------------|
| Cat. no./Qty. | 15628.2 / 1 | 15628.2 / 1 | 15628.2 / 1 | 15628.2 / 1 |

| | | | | | |
|--|---|---|--|---|--|
| PRSU 4G/24V AC eco | PRSU 4G/230V AC eco | PRSU 4Z/24V DC eco | PRSU 4Z/24V AC eco | PRSU 4Z/230V AC eco | |
|  |  |  |  |  | |
| PRSU 4G/24V AC eco 15623.2 / 1 78 x 27.1 x 70 mm 100g | PRSU 4G/230V AC eco 15624.2 / 1 78 x 27.1 x 70 mm 100g | PRSU 4Z/24V DC eco 15625.2 / 1 98 x 31 x 69.2 mm 109g | PRSU 4Z/24V AC eco 15626.2 / 1 98 x 31 x 69.2 mm 109g | PRSU 4Z/230V AC eco 15627.2 / 1 98 x 31 x 69.2 mm 109g | |

| | | | | | |
|--|---|--|--|---|--|
| PRS 4/24V AC eco 15592.2 / 1 35g | PRS 4/230V AC eco 15593.2 / 1 35g | PRS 4/24V DC eco 15591.2 / 1 35g | PRS 4/24V AC eco 15592.2 / 1 35g | PRS 4/230V AC eco 15593.2 / 1 35g | |
|--|---|--|--|---|--|

| | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|--|
| Insulation IEC 664/VDE 0110, Rated voltage 250V, contamination degree 2, overvoltage category III, | | | | | |
| 2.5 KV | 2.5 KV | 2.5 KV | 2.5 KV | 2.5 KV | |
| -25 to +55°C | -25 to +55°C | -25 °C to +70°C | -25 to +55°C | -25 to +55°C | |
| yes | yes | yes | yes | yes | |
| red LED | red LED | red LED | red LED | red LED | |
| yes | yes | yes | yes | yes | |
| no | no | yes | no | no | |
| 24V AC | 230V AC | 12V DC | 24V AC | 230V AC | |
| 1.6 VA | 1.6 VA | 0.9 W | 1.6 VA | 1.6 VA | |
| 50/60 Hz | 50/60 Hz | - | 50/60 Hz | 50/60 Hz | |
| 4 CO contact | 4 CO contact | 4 CO contact | 4 CO contact | 4 CO contact | |
| 250 V /250 V | 250 V /250 V | 250 V /250 V | 250 V /250 V | 250 V /250 V | |
| 5 V | 5 V | 5 V | 5 V | 5 V | |
| 6 A, 250 V AC | 6 A, 250 V AC | 6 A, 250 V AC | 6 A, 250 V AC | 6 A, 250 V AC | |
| 6 A / 24 V DC | 6 A / 24 V DC | 6 A / 24 V DC | 6 A / 24 V DC | 6 A / 24 V DC | |
| 12 A | 12 A | 12 A | 12 A | 12 A | |
| 1500VA | 1500VA | 1500VA | 1500VA | 1500VA | |
| 0.3W | 0.3W | 0.3W | 0.3W | 0.3W | |
| ≤ 100 mΩ | ≤ 100 mΩ | ≤ 100 mΩ | ≤ 100 mΩ | ≤ 100 mΩ | |
| 1200 Cycles per hour | 1200 Cycles per hour | 1200 Cycles per hour | 1200 Cycles per hour | 1200 Cycles per hour | |
| 18000 Cycles per hour | 18000 Cycles per hour | 18000 Cycles per hour | 18000 Cycles per hour | 18000 Cycles per hour | |
| 13 ms / 3 ms | 13 ms / 3 ms | 13 ms / 3 ms | 13 ms / 3 ms | 13 ms / 3 ms | |
| AgNi | AgNi | AgNi | AgNi | AgNi | |
| ≥ 1 x 10 ⁵ | ≥ 1 x 10 ⁵ | ≥ 1 x 10 ⁵ | ≥ 1 x 10 ⁵ | ≥ 1 x 10 ⁵ | |
| ≥ 2 x 10 ⁷ | ≥ 2 x 10 ⁷ | ≥ 2 x 10 ⁷ | ≥ 2 x 10 ⁷ | ≥ 2 x 10 ⁷ | |

| | | | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| PRS 4 G 15324.2 / 1 | PRS 4 G 15324.2 / 1 | PRS 4 Z 15431.2 / 1 | PRS 4 Z 15431.2 / 1 | PRS 4 Z 15431.2 / 1 | |
| TS 35 | TS 35 | TS 35 | TS 35 | TS 35 | |
| 2.8mm fast-on | 2.8mm fast-on | 2.8mm fast-on | 2.8mm fast-on | 2.8mm fast-on | |
| Screw connection | Screw connection | Tension-spring connection | Tension-spring connection | Tension-spring connection | |
| 10 A | 10 A | 12 A | 12 A | 12 A | |
| 300 V | 300 V | 300 V | 300 V | 300 V | |
| 2400 Veff | 2400 Veff | > 2500 Veff | > 2500 Veff | > 2500 Veff | |
| C/250 V | C/250 V | C/250 V | C/250 V | C/250 V | |
| -25 °C to +80°C | -25 °C to +80°C | -25 °C to +70°C | -25 °C to +70°C | -25 °C to +70°C | |
| IP 20 | IP 20 | IP 20 | IP 20 | IP 20 | |
| V-0 | V-0 | V-0 | V-0 | V-0 | |
| VBG 4 | VBG 4 | VBG 4 | VBG 4 | VBG 4 | |
| 2 x 2.5 mm ² | 2 x 2.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | |
| 2 x 1.5 mm ² | 2 x 1.5 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | |
| max. 0.8 Nm | max. 0.8 Nm | - | - | - | |
| 7 mm | 7 mm | 7 mm | 7 mm | 7 mm | |
| UL/CSA | UL/CSA | UL/CSA | UL/CSA | UL/CSA | |

| | | | | | |
|---|---|---|---|---|--|
| PRS C4 eco 15628.2 / 1 | PRS C4 eco 15628.2 / 1 | PRS C4 eco 15628.2 / 1 | PRS C4 eco 15628.2 / 1 | PRS C4 eco 15628.2 / 1 | |
|---|---|---|---|---|--|

Plug relay system PRS

Tension-spring connection

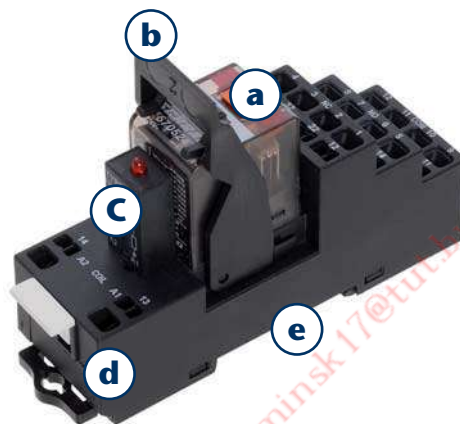
The **PRS Z** relay bases extend the **PRS** plug-relay system with their wide-spread tension-spring connection mechanism. Each of the base's conductor connections is doubled in order to allow for a simple double potential pick-off (test point). The well-known advantages of the **PRS** relay system also apply to this base. The entire line of accessories with which you are already familiar are compatible and can be used with the bases. So you can make use of the same illuminated displays and holding clamps that are used with the screw connection mechanism. Dependable functioning is always certain because of the combination with the proven **PRS**-system relays.

1. Overview

a Pluggable relays
Pluggable relays are also available with AgSNO and gold contacts, to fit with the many functions of your individual requirements!



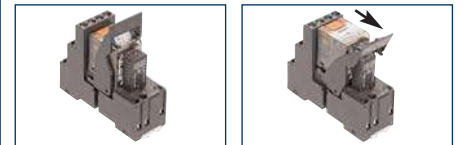
e Mounts on standard TS 35 rail
CONTA-CLIP relay bases can be flexibly mounted on standard TS 35 mounting rails according to EN 50035 and EN 50022.



AQI/PRS external cross-connector

d The AQI/PRS external cross-connection system enables a time-saving distribution of potentials. With this system, you can save time when coupling multiple relay components.

b Using the mount/dismount lever
The mounting and dismounting mechanism forms a reliable connection by latching the relay with the socket base. The fitted relay can be removed, easily and without force, from the socket base by using the dismount function of the lever!



c Pluggable LED and protective modules
Pluggable modules allow easy insertion into the base, with reverse-connect protection. The module circuitry is effective in parallel to the coil of the deployed relay.



2. Features

1. Relay

- **PLUG RELAY SYSTEM** (relays with 1, 2, or 4 COs)
- Load-independent switching
- Direct control via the PLC outputs
- High interference immunity
- Electrical isolation of control and load circuits
- Minimal contact resistance, and high insulation resistance
- PRS XT relay features switch/button for HAND/AUTOMATIC switching and an integrated LED to show the status of the switch
- PRS 4 relay features switch/button for HAND/AUTOMATIC switching
- PRS 4 eco relay features switch/button for HAND/AUTOMATIC switching, and an integrated LED for signalling the switching status

Technical data for the available relays can be found on the following product pages.

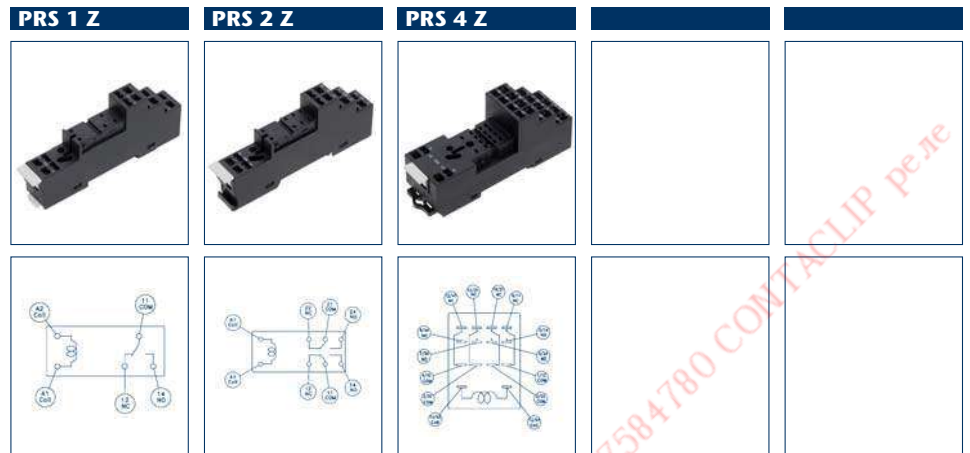


Plug relay system PRS

Tension-spring connection

II. Socket base

- Mount on TS 35
- Very flexible and modular construction of individual relay bases
- User-friendly, because the relays can be easily replaced
- High-quality connection terminals
- Doubled connections
- Pluggable LED display with additional protective circuitry
- Holding clamp made of high-quality plastic

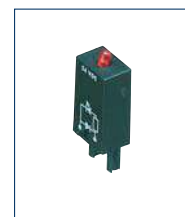


| Type | PRS 1 Z | PRS 2 Z | PRS 4 Z | | |
|--|--------------------------------|--------------------------------|--------------------------------|--|--|
| Cat. no./Qty. | 15780.2/1 | 15789.2/1 | 15431.2/1 | | |
| Size (L x W x H) with TS 35 | 98 x 16.3 x 47.5 mm | 98 x 16.3 x 47.5 mm | 98 x 31 x 47.5 mm | | |
| Size with holding clamp (L x W x H) with TS 35 | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | 98 x 31 x 69.2 mm | | |
| Weight | 42 g | 44 g | 74 g | | |
| General | | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | | |
| Plug-in modules for | 3.5 mm pinning | 5 mm pinning | 2.8 mm fast-on | | |
| Connection type | Tension-spring | Tension-spring | Tension-spring | | |
| Technical data | | | | | |
| Rated current | 12 A | 10 A | 12 A | | |
| Rated voltage | 300 V | 300 V | 300 V | | |
| Dielectric strength coil/contact | > 2500 Veff | > 2500 Veff | > 2500 Veff | | |
| Insulation group (VDE 0110 b) | C/250 V | C/250 V | C/250 V | | |
| Ambient temperature | -25 to +70°C | -25 to +70°C | -25 to +70°C | | |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | | |
| Flammability class UL 94 | V-0 | V-0 | V-0 | | |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | | |
| Connection cross-section | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | | |
| With ferrule | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | | |
| Insulation stripping length | 7 mm | 7 mm | 7 mm | | |
| Approvals | UL/CSA | UL/CSA | UL/CSA | | |

III. Insert modules

- Plugs simply into the base, reverse-connect protection
- Circuitry parallel to coil

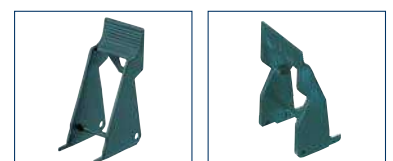
| Cat. no./Qty. | Type | Voltage range | |
|------------------|--------------------------|------------------|--------------------------------------|
| 15141.2/1 | PRS LED(RD) 24V DC | 12 to 24 V DC | Status display with free-wheel diode |
| 15142.2/1 | PRS LED(RD) 230V AC | 110 to 230 V AC | Status display |
| 15175.2/1 | PRS LED(RD) 24V UC | 12 to 48 V AC/DC | Status display |
| 15422.2/1 | PRS LED(RD)/110V DC | 60 to 110 V DC | Status display with free-wheel diode |
| 15810.2/1 | PRS LED(RD) 230V UC Var. | 24 V AC/DC | Status display with varistor |
| 16070.2/1 | PRS LED(GN) 24V UC Var. | 230 V AC/DC | Status display with varistor |
| 15808.2/1 | PRS RC 24V AC | 24 V AC | Plug-in module with RC element |
| 15809.2/1 | PRS RC 240V AC | 240 V AC | Plug-in module with RC element |






IV. Holding clamp

The mount/dismount clamp forms a reliable connection by latching the relay with the socket base. The fitted relay can be removed, easily and without force, from the socket base by using the dismount function of the lever.

| Cat. no./Qty. | Type | Weight |
|------------------|-------------|--------|
| 15138.2/1 | PRS C 1/C 2 | 2 g |
| 15140.2/1 | PRS C 4 | 4 g |
| 15628.2/1 | PRS C 4 eco | 4 g |
| 16016.2/1 | PRSXT C1/2 | 4 g |



Relay 1-CO PRS 1 XT

| Complete tension-spring connection units | | PRSUXT 1Z/24V DC | PRSUXT 1Z/24V AC | PRSUXT 1Z/230V AC | |
|---|--|---|--|---|--|
| consisting of: | |  |  |  | |
| · Relay · Socket base · Holding clamp | | | | | |
| Type | | PRSUXT 1Z/24V DC | PRSUXT 1Z/24V AC | PRSUXT 1Z/230V AC | |
| Cat. no./Qty. | | 16092.2 / 1 | 16093.2 / 1 | 16094.2 / 1 | |
| Size (L x W x H) with TS 35 x 7.5 | | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | |
| Weight | | 60g | 60g | 60g | |

Individual components

Relay 1W, open design, with switch and status display

| Type | PRSXT 1/24V DC | PRSXT 1/24V AC | PRSXT 1/230V AC | |
|--|--|-----------------------|-----------------------|--|
| Cat. no./Qty. | 16083.2 / 1 | 16084.2 / 1 | 16085.2 / 1 | |
| Dimensions (L x W x H) | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | |
| Weight | 16g | 16g | 16g | |
| Common data | | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, Rated voltage 250 V, contamination degree 3, Overvoltage category III, Flammability class UL 94 V-0 | | | |
| Test voltage coil/contact | 2.5 kV | 2.5 kV | 2.5 kV | |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | |
| Lockable test button | yes | yes | yes | |
| Indicators | red LED | red LED | red LED | |
| Mechanical indicator | yes | yes | yes | |
| Free-wheel diode | yes | no | no | |
| Input data | | | | |
| Input voltage | 24 V DC | 24V AC | 230V AC | |
| Rated power consumption | 0.4W | 0.76VA | 0.74VA | |
| Frequency | - | 50/60 Hz | 50/60 Hz | |
| Output specifications | | | | |
| Contacts | 1 CO contact | 1 CO contact | 1 CO contact | |
| Switching voltage/Max. switching voltage | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | |
| Max. continuous current | 16 A / 240 V AC | 16 A, 240 V AC | 16 A, 240 V AC | |
| Max. inrush current 4s / 30 ms | 30 A /300 A | 30 A /300 A | 30 A /300 A | |
| Max. contact load | 4000 VA | 4000 VA | 4000 VA | |
| Min. suggested contact load | 12V at 10mA | 12V at 10mA | 12V at 10mA | |
| Voltage drop | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | |
| Max. switching frequency at operating load | 360 Cycles per hour | 360 Cycles per hour | 360 Cycles per hour | |
| Max. switching frequency without load | 36000 Cycles per hour | 36000 Cycles per hour | 36000 Cycles per hour | |
| Typical response time/release time | 8 ms/6 ms | 8 ms/6 ms | 8 ms/6 ms | |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | |
| Electrical service life | 50 x 10 ³ | 50 x 10 ³ | 50 x 10 ³ | |
| Mechanical service life | 10 x 10 ⁶ | 5 x 10 ⁶ | 5 x 10 ⁶ | |

Socket base

| Type | PRS 2 Z | PRS 2 Z | PRS 2 Z | |
|------------------------------|--------------------------------|--------------------------------|--------------------------------|--|
| Cat. no./Qty. | 15789.2 / 1 | 15789.2 / 1 | 15789.2 / 1 | |
| Overview | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | |
| Plug-in base for | 5mm pinning | 5mm pinning | 5mm pinning | |
| Connection type | Tension-spring connection | Tension-spring connection | Tension-spring connection | |
| Technical data | | | | |
| Rated current | 10A | 10A | 10A | |
| Rated voltage | 300 V | 300 V | 300 V | |
| Dielectric strength | > 2500 Veff | > 2500 Veff | > 2500 Veff | |
| Insulation group (VDE 0110b) | C/250 V | C/250 V | C/250 V | |
| Ambient temperature | -25 °C to +70°C | -25 °C to +70°C | -25 °C to +70°C | |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | |
| Flammability class UL 94 | V-0 | V-0 | V-0 | |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | |
| Connection cross-section | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | |
| With ferrules | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | |
| Stripping length | 7 mm | 7 mm | 7 mm | |
| Approvals | UL/CSA | UL/CSA | UL/CSA | |

Holding clamp

| Type | PRSXT C1/2 | PRSXT C1/2 | PRSXT C1/2 | |
|---------------|--------------|--------------|--------------|--|
| Cat. no./Qty. | 16016.2 / 20 | 16016.2 / 20 | 16016.2 / 20 | |

Relay 2-CO PRS 2 XT

| Complete tension-spring connection units consisting of: | | PRSUXT 2Z/24V DC | PRSUXT 2Z/24V AC | PRSUXT 2Z/230V AC | |
|---|--|---|--|---|--|
| <ul style="list-style-type: none"> Relay Socket base Holding clamp | |  |  |  | |
| Type | PRSUXT 2Z/24V DC | PRSUXT 2Z/24V AC | PRSUXT 2Z/230V AC | | |
| Cat. no./Qty. | 16023.2 / 1 | 16024.2 / 1 | 16025.2 / 1 | | |
| Size (L x W x H) with TS 35 x 7.5 | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | | |
| Weight | 60g | 60g | 60g | | |
| Individual components | | | | | |
| Relay 2W, open design, with switch and status display | | | | | |
| Type | PRSXT 2/24V DC | PRSXT 2/24V AC | PRSXT 2/230V AC | | |
| Cat. no./Qty. | 16013.2 / 1 | 16014.2 / 1 | 16015.2 / 1 | | |
| Dimensions (L x W x H) | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | 29 x 13 x 30.55 mm | | |
| Weight | 16g | 16g | 16g | | |
| Common data | | | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, Rated voltage 250 V, contamination degree 3, Overvoltage category III, Flammability class UL 94 V-0 | | | | |
| Test voltage coil/contact | 2.5 kV | 2.5 kV | 2.5 kV | | |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | | |
| Lockable test button | yes | yes | yes | | |
| Indicators | red LED | red LED | red LED | | |
| Mechanical indicator | yes | yes | yes | | |
| Free-wheel diode | yes | no | no | | |
| Input data | | | | | |
| Input voltage | 24 V DC | 24V AC | 230V AC | | |
| Rated power consumption | 0.4W | 0.76VA | 0.74VA | | |
| Frequency | - | 50/60 Hz | 50/60 Hz | | |
| Output specifications | | | | | |
| Contacts | 2 CO contact | 2 CO contact | 2 CO contact | | |
| Switching voltage/Max. switching voltage | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | | |
| Max. continuous current | 8 A, 240 V AC | 8 A, 240 V AC | 8 A, 240 V AC | | |
| Max. inrush current 4s / 30 ms | 15 A /300 A | 15 A /300 A | 15 A /300 A | | |
| Max. contact load | 2000 VA | 2000 VA | 2000 VA | | |
| Min. suggested contact load | 12V at 10mA | 12V at 10mA | 12V at 10mA | | |
| Voltage drop | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | 30mV at 100mA/6VDC | | |
| Max. switching frequency at operating load | 360 Cycles per hour | 360 Cycles per hour | 360 Cycles per hour | | |
| Max. switching frequency without load | 36000 Cycles per hour | 36000 Cycles per hour | 36000 Cycles per hour | | |
| Typical response time/release time | 10 ms/5 ms | 10 ms/5 ms | 10 ms/5 ms | | |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | | |
| Electrical service life | 50 x 10 ³ | 50 x 10 ³ | 50 x 10 ³ | | |
| Mechanical service life | 10 x 10 ⁶ | 5 x 10 ⁶ | 5 x 10 ⁶ | | |
| Socket base | | | | | |
| Type | PRS 2 Z | PRS 2 Z | PRS 2 G | | |
| Cat. no./Qty. | 15789.2 / 1 | 15789.2 / 1 | 15320.2 / 1 | | |
| Overview | | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | | |
| Plug-in base for | 5mm pinning | 5mm pinning | 5mm pinning | | |
| Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection | | |
| Technical data | | | | | |
| Rated current | 10A | 10A | 10A | | |
| Rated voltage | 300 V | 300 V | 300 V | | |
| Dielectric strength | > 2500 Veff | > 2500 Veff | > 2500 Veff | | |
| Insulation group (VDE 0110b) | C/250 V | C/250 V | C/250 V | | |
| Ambient temperature | -25 °C to +70°C | -25 °C to +70°C | -25 °C to +70°C | | |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | | |
| Flammability class UL 94 | V-0 | V-0 | V-0 | | |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | | |
| Connection cross-section | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | | |
| With ferrules | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | | |
| Stripping length | 7 mm | 7 mm | 7 mm | | |
| Approvals | UL/CSA | UL/CSA | UL/CSA | | |
| Holding clamp | | | | | |
| Type | PRSXT C1/2 | PRSXT C1/2 | PRSXT C1/2 | | |
| Cat. no./Qty. | 16016.2 / 20 | 16016.2 / 20 | 16016.2 / 20 | | |

Relay 1 CO contact, PRS 1 Z

| Complete tension-spring connection components | | PRSU 1Z/12 V DC | PRSU 1Z/24 V DC | PRSU 1Z/60 V DC | PRSU 1Z/110 V DC |
|---|--|------------------------|------------------------|------------------------|-------------------------|
| consisting of: | | | | | |
| · Relay | | | | | |
| · Insert module | | | | | |
| · Socket base | | | | | |
| · Holding clamp | | | | | |
| Type | | PRSU 1Z/12 V DC | PRSU 1Z/24 V DC | PRSU 1Z/60 V DC | PRSU 1Z/110 V DC |
| Cat. no./Qty. | | 15781.2/1 | 15782.2/1 | 15783.2/1 | 15784.2/1 |
| Size (L x W x H) with TS 35 | | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm |
| Weight | | 59 g | 59 g | 59 g | 59 g |

Individual components

Relay 1 CO, encapsulated design

| Type | PRS 1/12 V DC | PRS 1/24 V DC | PRS 1/60 V DC | PRS 1/110 V DC |
|--|--|------------------------|------------------------|------------------------|
| Cat. no./Qty. | 6996.0/1 | 6804.0/1 | 15539.2/1 | 15540.2/1 |
| Weight | 15 g | 15 g | 15 g | 15 g |
| General information | | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | |
| Test voltage coil/contact | 5 kV | 5 kV | 5 kV | 5 kV |
| Pinning | 3.5 mm | 3.5 mm | 3.5 mm | 3.5 mm |
| Operating temperature | -40 to +85°C | -40 to +85°C | -40 to +85°C | -40 to +85°C |
| Important notes | - | - | - | - |
| Input data | | | | |
| Input voltage | 12 V DC | 24 V DC | 60 V DC | 110 V DC |
| Rated power consumption | 0.40 W | 0.40 W | 0.42 W | 0.42 W |
| Output data | | | | |
| Contacts | 1 CO contacts | 1 CO contacts | 1 CO contacts | 1 CO contacts |
| Switching voltage/Max. switching voltage | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC |
| Max continuous current/inrush current | 12 A/25 A | 12 A/25 A | 12 A/25 A | 12 A/25 A |
| Typical response time/release time | 7 ms/3 ms | 7 ms/3 ms | 7 ms/3 ms | 7 ms/3 ms |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 |
| Electrical service life | 1.2 x 10 ³ | 1.2 x 10 ³ | 1.2 x 10 ³ | 1.2 x 10 ³ |
| At contact load | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC |
| Mechanical life span | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ | > 30 x 10 ⁶ |

Insert module





| Type | PRS LED 24 V DC | PRS LED 24 V DC | PRS LED 110 V DC | PRS LED 110 V DC |
|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Cat. no./Qty. | 15141.2/1 | 15141.2/1 | 15422.2/1 | 15422.2/1 |
| Protected against polarity reversal | Status display with free-wheel diode | Status display with free-wheel diode | Status display with free-wheel diode | Status display with free-wheel diode |
| In parallel to coil | 12 to 24 V DC | 12 to 24 V DC | 60 to 110 V DC | 60 to 110 V DC |

Socket base

| Type | PRS 1 Z | PRS 1 Z | PRS 1 Z | PRS 1 Z |
|-------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Cat. no./Qty. | 15780.2/1 | 15780.2/1 | 15780.2/1 | 15780.2/1 |
| General | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in base for | 3.5 mm pinning | 3.5 mm pinning | 3.5 mm pinning | 3.5 mm pinning |
| Connection type | Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection |
| Technical data | | | | |
| Rated current | 12 A | 12 A | 12 A | 12 A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength | > 2500 Veff | > 2500 Veff | > 2500 Veff | > 2500 Veff |
| Insulation group (VDE 0110 b) | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25 to +70°C | -25 to +70°C | -25 to +70°C | -25 to +70°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² |
| With ferrule | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² |
| Insulation stripping length | 7 mm | 7 mm | 7 mm | 7 mm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

Holding clamp

| Type | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 |
|----------------------|------------------|------------------|------------------|------------------|
| Cat. no./Qty. | 15138.2/1 | 15138.2/1 | 15138.2/1 | 15138.2/1 |

| PRSU 1LZ/24 V DC | PRSU 1Z/24 V AC | PRSU 1Z/115 V AC | PRSU 1Z/230 V AC | | |
|--|---|---|--|--|--|
|  |  |  |  | | |
| PRSU 1LZ/24 V DC 15788.2/1 | PRSU 1Z/24 V AC 15785.2/1 | PRSU 1Z/115 V AC 15786.2/1 | PRSU 1Z/230 V AC 15787.2/1 | | |
| 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | | |
| 59 g | 59 g | 59 g | 59 g | | |

Individual components
Relay 1 CO, encapsulated design

| PR 1L/24 V DC | PR 1/24 V AC | PR 1/115 V AC | PR 1/230 V AC | | |
|--|------------------------|------------------------|------------------------|--|--|
| 6940.0/1 | 6480.2/1 | 15228.2/1 | 6481.2/1 | | |
| 15 g | 15 g | 15 g | 15 g | | |
| Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | | | |
| 4 kV | 5 kV | 5 kV | 5 kV | | |
| 5 mm | 3.5 mm | 3.5 mm | 3.5 mm | | |
| -20 to +50°C | -40 to +85°C | -40 to +85°C | -40 to +85°C | | |
| Inductive loads | - | - | - | | |
| 24 V DC | 24 V AC | 115 V AC | 230 V AC | | |
| 0.50 W | 0.75 VA | 0.75 VA | 0.75 VA | | |
| 1 CO contacts | 1 CO contacts | 1 CO contacts | 1 CO contacts | | |
| 240 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | | |
| 16 A/80 A (20 ms) | 12 A/25 A | 12 A/25 A | 12 A/25 A | | |
| 10 ms/10 ms | 7 ms/3 ms | 7 ms/3 ms | 7 ms/3 ms | | |
| AgSn O2 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | | |
| 1 x 10 ⁵ | 1.2 x 10 ³ | 1.2 x 10 ³ | 1.2 x 10 ³ | | |
| 16 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | | |
| > 30 x 10 ⁶ | > 10 x 10 ⁶ | > 10 x 10 ⁶ | > 10 x 10 ⁶ | | |

Insert module

| PRS LED 24 V DC | PRS LED 24 V UC | PRS LED 230 V AG | PRS LED 230 V AG | | |
|--------------------------------------|------------------|------------------|------------------|--|--|
| 15141.2/1 | 15175.2/1 | 15142.2/1 | 15142.2/1 | | |
| Status display with free-wheel diode | Status display | Status display | Status display | | |
| 12 to 24 V DC | 12 to 48 V AC/DC | 110 to 230 V AC | 110 to 230 V AC | | |

Socket base






| PR 2 Z | PR 1 Z | PR 1 Z | PR 1 Z | | |
|------------------------------|------------------------------|------------------------------|------------------------------|--|--|
| 15789.2/1 | 15780.2/1 | 15780.2/1 | 15780.2/1 | | |
| TS 35 | TS 35 | TS 35 | TS 35 | | |
| 5 mm pinning | 3.5 mm pinning | 3.5 mm pinning | 3.5 mm pinning | | |
| Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection | | |
| 10 A | 12 A | 12 A | 12 A | | |
| 300 V | 300 V | 300 V | 300 V | | |
| > 2500 Veff | > 2500 Veff | > 2500 Veff | > 2500 Veff | | |
| C/250 V | C/250 V | C/250 V | C/250 V | | |
| -25 to +70°C | -25 to +70°C | -25 to +70°C | -25 to +70°C | | |
| IP 20 | IP 20 | IP 20 | IP 20 | | |
| V-0 | V-0 | V-0 | V-0 | | |
| VBG 4 | VBG 4 | VBG 4 | VBG 4 | | |
| 2 x 0.2-1.5 mm ² | 2 x 0.2-1.5 mm ² | 2 x 0.2-1.5 mm ² | 2 x 0.2-1.5 mm ² | | |
| 2 x 0.2-0.75 mm ² | 2 x 0.2-0.75 mm ² | 2 x 0.2-0.75 mm ² | 2 x 0.2-0.75 mm ² | | |
| 7 mm | 7 mm | 7 mm | 7 mm | | |
| UL/CSA | UL/CSA | UL/CSA | UL/CSA | | |

Holding clamp

| PR C 1/2 | PR C 1/2 | PR C 1/2 | PR C 1/2 | | |
|------------------|------------------|------------------|------------------|--|--|
| 15138.2/1 | 15138.2/1 | 15138.2/1 | 15138.2/1 | | |

Relay 2 CO contacts, PRS 2 Z

| Complete tension-spring connection components | | PRSU 2Z/12 V DC | PRSU 2Z/24 V DC | PRSU 2Z/48 V DC | PRSU 2Z/60 V DC |
|--|--|--------------------------------------|--------------------------------|--------------------------------------|-----------------|
| consisting of: | | | | | |
| <ul style="list-style-type: none"> Relay Insert module Socket base Holding clamp | | | | | |
| Type | PRSU 2Z/12 V DC | PRSU 2Z/24 V DC | PRSU 2Z/48 V DC | PRSU 2Z/60 V DC | |
| Cat. no./Qty. | 15790.2/1 | 15791.2/1 | 15792.2/1 | 15793.2/1 | |
| Size (L x W x H) with TS 35 | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | 98 x 16.3 x 69.2 mm | |
| Weight | 61 g | 61 g | 61 g | 61 g | |
| Individual components | | | | | |
| Relay 2 CO, encapsulated design | | | | | |
| Type | PRS 2/12 V DC | PRS 2/24 V DC | PRS 2/48 V DC | PRS 2/60 V DC | |
| Cat. no./Qty. | 6482.2/1 | 6483.2/1 | 15334.2/1 | 15335.2/1 | |
| Weight | 15 g | 15 g | 15 g | 15 g | |
| General information | | | | | |
| DIN-VDE specifications | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | | |
| Test voltage coil/contact | 5 kV | 5 kV | 5 kV | 5 kV | |
| Pinning | 5 mm | 5 mm | 5 mm | 5 mm | |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | |
| Input data | | | | | |
| Input voltage | 12 V DC | 24 V DC | 48 V DC | 60 V DC | |
| Rated power consumption | 0.40 W | 0.40 W | 0.40 W | 0.40 W | |
| Output data | | | | | |
| Contacts | 2 CO contacts | 2 CO contacts | 2 CO contacts | 2 CO contacts | |
| Switching voltage/Max. switching voltage | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | |
| Max continuous current/inrush current | 8 A/15 A | 8 A/15 A | 8 A/15 A | 8 A/15 A | |
| Typical response time/release time | 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms | |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | |
| Electrical service life | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | |
| At contact load | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | |
| Mechanical life span | >30 x 10 ⁶ | >30 x 10 ⁶ | >30 x 10 ⁶ | >30 x 10 ⁶ | |
| Insert module | | | | | |
| Type | PRS LED 24 V DC | PRS LED 24 V DC | PRS LED 24 V UC | PRS LED 110 V DC | |
| Cat. no./Qty. | 15141.2/1 | 15141.2/1 | 15175.2/1 | 15422.2/1 | |
| Protected against polarity reversal | Status display with free-wheel diode | Status display with free-wheel diode | Status display | Status display with free-wheel diode | |
| In parallel to coil | 12 to 24 V DC | 12 to 24 V DC | 12 to 48 V AC/DC | 60 to 110 V DC | |
| Socket base | | | | | |
| Type | PRS 2 Z | PRS 2 Z | PRS 2 Z | PRS 2 Z | |
| Cat. no./Qty. | 15789.2/1 | 15789.2/1 | 15789.2/1 | 15789.2/1 | |
| General | | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 | |
| Plug-in base for | 5 mm pinning | 5 mm pinning | 5 mm pinning | 5 mm pinning | |
| Connection type | Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection | |
| Technical data | | | | | |
| Rated current | 10 A | 10 A | 10 A | 10 A | |
| Rated voltage | 300 V | 300 V | 300 V | 300 V | |
| Dielectric strength | > 2500 Veff | > 2500 Veff | > 2500 Veff | > 2500 Veff | |
| Insulation group (VDE 0110 b) | C/250 V | C/250 V | C/250 V | C/250 V | |
| Ambient temperature | -25 to +70°C | -25 to +70°C | -25 to +70°C | -25 to +70°C | |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 | |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 | |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 | |
| Connection cross-section | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | |
| With ferrule | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | |
| Insulation stripping length | 7 mm | 7 mm | 7 mm | 7 mm | |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA | |
| Holding clamp | | | | | |
| Type | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 | |
| Cat. no./Qty. | 15138.2/1 | 15138.2/1 | 15138.2/1 | 15138.2/1 | |

| PRSU 2Z/110 V DC | PRSU 2Z/24 V AC | PRSU 2Z/48 V AC | PRSU 2Z/115 V AC | PRSU 2Z/230 V AC | |
|--|---|---|--|---|--|
|  |  |  |  |  | |
| PRSU 2Z/110 V DC 15794.2/1 | PRSU 2Z/24 V AC 15795.2/1 | PRSU 2Z/48 V AC 15950.2/1 | PRSU 2Z/115 V AC 15796.2/1 | PRSU 2Z/230 V AC 15797.2/1 | |
| 98 x 16.3 x 69.2 mm 61 g | 98 x 16.3 x 69.2 mm 61 g | 98 x 16.3 x 69.2 mm 61 g | 98 x 16.3 x 69.2 mm 61 g | 98 x 16.3 x 69.2 mm 61 g | |

Individual components

Relay 2 CO, encapsulated design

| PRS 2/110 V DC | PRS 2/24 V AC | PRS 2/48 V AC | PRS 2/115 V AC | PRS 2/230 V AC | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|--|
| 15541.2/1 | 6484.2/1 | 15947.2/1 | 15229.2/1 | 6485.2/1 | |
| 15 g | 15 g | 15 g | 15 g | 15 g | |
| Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | | | |
| 5 kV | 5 kV | 5 kV | 5 kV | 5 kV | |
| 5 mm | 5 mm | 5 mm | 5 mm | 5 mm | |
| -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C | |
| 110 V DC | 24 V AC | 48 V AC | 115 V AC | 230 V AC | |
| 0.40 W | 0.75 VA | 0.75 VA | 0.75 VA | 0.75 VA | |
| 2 CO contacts | 2 CO contacts | 2 CO contacts | 2 CO contacts | 2 CO contacts | |
| 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | 240 V AC/400 V AC | |
| 8 A/15 A | 8 A/15 A | 8 A/15 A | 8 A/15 A | 8 A/15 A | |
| 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms | 7 ms/2 ms | |
| AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | |
| 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | |
| 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | 4 A, 230 V AC | |
| >30 x 10 ⁶ | >5 x 10 ⁶ | >5 x 10 ⁶ | > 5 x 10 ⁶ | > 5 x 10 ⁶ | |

Insert module

| PRS LED 110 V DC | PRS LED 24 V UC | PRS LED 24 V UC | PRS LED 230 V AC | PRS LED 230 V AC | |
|--------------------------------------|------------------|------------------|------------------|------------------|--|
| 15422.2/1 | 15175.2/1 | 15175.2/1 | 15142.2/1 | 15142.2/1 | |
| Status display with free-wheel diode | Status display | Status display | Status display | Status display | |
| 60 to 110 V DC | 12 to 48 V AC/DC | 12 to 48 V AC/DC | 110 to 230 V AC | 110 to 230 V AC | |

Socket base

| PRS 2 Z | PRS 2 Z | PRS 2 Z | PRS 2 Z | PRS 2 Z | |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--|
| 15789.2/1 | 15789.2/1 | 15789.2/1 | 15789.2/1 | 15789.2/1 | |
| TS 35 | TS 35 | TS 35 | TS 35 | TS 35 | |
| 5 mm pinning | 5 mm pinning | 5 mm pinning | 5 mm pinning | 5 mm pinning | |
| Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection | |
| 10 A | 10 A | 10 A | 10 A | 10 A | |
| 300 V | 300 V | 300 V | 300 V | 300 V | |
| > 2500 Veff | > 2500 Veff | > 2500 Veff | > 2500 Veff | > 2500 Veff | |
| C/250 V | C/250 V | C/250 V | C/250 V | C/250 V | |
| -25 to +70°C | -25 to +70°C | -25 to +70°C | -25 to +70°C | -25 to +70°C | |
| IP 20 | IP 20 | IP 20 | IP 20 | IP 20 | |
| V-0 | V-0 | V-0 | V-0 | V-0 | |
| VBG 4 | VBG 4 | VBG 4 | VBG 4 | VBG 4 | |
| 2 x 0.2-1.5 mm ² | 2 x 0.2-1.5 mm ² | 2 x 0.2-1.5 mm ² | 2 x 0.2-1.5 mm ² | 2 x 0.2-1.5 mm ² | |
| 2 x 0.2-0.75 mm ² | 2 x 0.2-0.75 mm ² | 2 x 0.2-0.75 mm ² | 2 x 0.2-0.75 mm ² | 2 x 0.2-0.75 mm ² | |
| 7 mm | 7 mm | 7 mm | 7 mm | 7 mm | |
| UL/CSA | UL/CSA | UL/CSA | UL/CSA | UL/CSA | |

Holding clamp

| PRS C 1/2 | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 | PRS C 1/2 | |
|------------------|------------------|------------------|------------------|------------------|--|
| 15138.2/1 | 15138.2/1 | 15138.2/1 | 15138.2/1 | 15138.2/1 | |

Relay 4 CO contacts, PRS 4 Z







| Complete tension-spring connection components | | PRSU 4Z/12 V DC | PRSU 4Z/24 V DC | PRSU 4Z/48 V DC | PRSU 4Z/60 V DC |
|---|--|------------------------|------------------------|------------------------|------------------------|
| consisting of: | | | | | |
| · Relay | | | | | |
| · Insert module | | | | | |
| · Socket base | | | | | |
| · Holding clamp | | | | | |
| Type | | PRSU 4Z/12 V DC | PRSU 4Z/24 V DC | PRSU 4Z/48 V DC | PRSU 4Z/60 V DC |
| Cat. no./Qty. | | 15798.2/1 | 15799.2/1 | 15800.2/1 | 15801.2/1 |
| Size (L x W x H) with TS 35 | | 98 x 31 x 69.2 mm | 98 x 31 x 69.2 mm | 98 x 31 x 69.2 mm | 98 x 31 x 69.2 mm |
| Weight | | 109 g | 109 g | 109 g | 109 g |

| Individual components | | | | |
|--|--|-----------------------|-----------------------|-----------------------|
| Relay 4 CO, encapsulated design | | | | |
| Type | PRS 4/12 V DC | PRS 4/24 V DC | PRS 4/48 V DC | PRS 4/60 V DC |
| Cat. no./Qty. | 6486.2/1 | 6487.2/1 | 15461.2/1 | 15336.2/1 |
| Weight | 30 g | 30 g | 30 g | 30 g |
| General information | Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | |
| DIN-VDE specifications | | | | |
| Test voltage coil/contact | 2.5 kV | 2.5 kV | 2.5 kV | 2.5 kV |
| Operating temperature | -40 to +70°C | -40 to +70°C | -40 to +70°C | -40 to +70°C |
| Input data | | | | |
| Input voltage | 12 V DC | 24 V DC | 48 V DC | 60 V DC |
| Rated power consumption | 0.75 W | 0.75 W | 0.75 W | 0.75 W |
| Output data | | | | |
| Contacts | 4 CO contacts | 4 CO contacts | 4 CO contacts | 4 CO contacts |
| Switching voltage/Max. switching voltage | 240 V AC/240 V AC | 240 V AC/240 V AC | 240 V AC/240 V AC | 240 V AC/240 V AC |
| Max continuous current/inrush current | 6 A/12 A | 6 A/12 A | 6 A/12 A | 6 A/12 A |
| Typical response time/release time | 15 ms/10 ms | 15 ms/10 ms | 15 ms/10 ms | 15 ms/10 ms |
| Contact material | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 | AgNi 90/10 |
| Electrical service life | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ | 1.5 x 10 ⁵ |
| At contact load | 6 A, 240 V AC | 6 A, 240 V AC | 6 A, 240 V AC | 6 A, 240 V AC |
| Mechanical life span | >30 x 10 ⁶ | >30 x 10 ⁶ | >30 x 10 ⁶ | >30 x 10 ⁶ |

| Insert module | | | | |
|-------------------------------------|--------------------------------------|--------------------------------------|------------------|--------------------------------------|
| Type | PRS LED 24 V DC | PRS LED 24 V DC | PRS LED 24 V UC | PRS LED 110 V DC |
| Cat. no./Qty. | 15141.2/1 | 15141.2/1 | 15175.2/1 | 15422.2/1 |
| Protected against polarity reversal | Status display with free-wheel diode | Status display with free-wheel diode | Status display | Status display with free-wheel diode |
| In parallel to coil | 12 to 24 V DC | 12 to 24 V DC | 12 to 48 V AC/DC | 60 to 110 V DC |

| Socket base | | | | |
|-------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Type | PRS 4 Z | PRS 4 Z | PRS 4 Z | PRS 4 Z |
| Cat. no./Qty. | 15431.2/1 | 15431.2/1 | 15431.2/1 | 15431.2/1 |
| General | | | | |
| Mounting foot for DIN rails | TS 35 | TS 35 | TS 35 | TS 35 |
| Plug-in base for | 2.8 mm fast-on | 2.8 mm fast-on | 2.8 mm fast-on | 2.8 mm fast-on |
| Connection type | Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection |
| Technical data | | | | |
| Rated current | 12 A | 12 A | 12 A | 12 A |
| Rated voltage | 300 V | 300 V | 300 V | 300 V |
| Dielectric strength | > 2500 Veff | > 2500 Veff | > 2500 Veff | > 2500 Veff |
| Insulation group (VDE 0110 b) | C/250 V | C/250 V | C/250 V | C/250 V |
| Ambient temperature | -25 to +70°C | -25 to +70°C | -25 to +70°C | -25 to +70°C |
| Protection degree, enclosure | IP 20 | IP 20 | IP 20 | IP 20 |
| Flammability class UL 94 | V-0 | V-0 | V-0 | V-0 |
| Touch protection, acc. to | VBG 4 | VBG 4 | VBG 4 | VBG 4 |
| Connection cross-section | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² | 2 x 0.2 - 1.5 mm ² |
| With ferrule | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² | 2 x 0.2 - 0.75 mm ² |
| Insulation stripping length | 7 mm | 7 mm | 7 mm | 7 mm |
| Approvals | UL/CSA | UL/CSA | UL/CSA | UL/CSA |

| Holding clamp | | | | |
|----------------------|------------------|------------------|------------------|------------------|
| Type | PRS C 4 | PRS C 4 | PRS C 4 | PRS C 4 |
| Cat. no./Qty. | 15140.2/1 | 15140.2/1 | 15140.2/1 | 15140.2/1 |

| | | | | | |
|--|---|---|--|---|---|
| PRSU 4Z/110 V DC | PRSU 4Z/220 V DC | PRSU 4Z/12 V AC | PRSU 4Z/24 V AC | PRSU 4Z/115 V AC | PRSU 4Z/230 V AC |
|  |  |  |  |  |  |
| PRSU 4Z/110 V DC 15802.2/1 | PRSU 4Z/220 V DC 15803.2/1 | PRSU 4Z/12 V AC 15804.2/1 | PRSU 4Z/24 V AC 15805.2/1 | PRSU 4Z/115 V AC 15806.2/1 | PRSU 4Z/230 V AC 15807.2/1 |
| 98 x 31 x 69.2 mm 109 g | 98 x 31 x 69.2 mm 109 g | 98 x 31 x 69.2 mm 109 g | 98 x 31 x 69.2 mm 109 g | 98 x 31 x 69.2 mm 109 g | 98 x 31 x 69.2 mm 109 g |

Individual components

Relay 4 CO, encapsulated design

| | | | | | |
|--|--|--|--|--|--|
| PRS 4/110 V DC 15542.2/1 | PRS 4/220 V DC 15368.2/1 | PRS 4/12 V AC 15393.2/1 | PRS 4/24 V UC 6488.2/1 | PRS 4/115 V AC 15257.2/1 | PRS 4/230 V AC 6489.2/1 |
| 30 g | 30 g | 30 g | 30 g | 30 g | 30 g |
| Insulation IEC 664/VDE 0110, rated voltage 250 V, pollution degree 3, overvoltage category III, flammability class UL 94 V-0 | | | | | |
| 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C | 2.5 kV -40 to +70°C |
| 110 V DC 0.75 W | 220 V DC 0.75 W | 12 V AC 1.0 VA | 24 V AC 1.0 VA | 115 V AC 1.0 VA | 230 V AC 1.0 VA |
| 4 CO contacts 240 V AC/240 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 240 V AC >30 x 10 ⁶ | 4 CO contacts 240 V AC/240 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 240 V AC >30 x 10 ⁶ | 4 CO contacts 240 V AC/240 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 240 V AC >20 x 10 ⁶ | 4 CO contacts 240 V AC/240 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 240 V AC >20 x 10 ⁶ | 4 CO contacts 240 V AC/240 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 240 V AC >20 x 10 ⁶ | 4 CO contacts 240 V AC/240 V AC 6 A/12 A 15 ms/10 ms AgNi 90/10 1.5 x 10 ⁵ 6 A, 240 V AC >20 x 10 ⁶ |

Insert module

| | | | | | |
|---|---|--|--|---|---|
| PRS LED 110 V DC 15422.2/1 | PRS LED 230 V AC 15142.2/1 | PRS LED 24 V UC 15175.2/1 | PRS LED 24 V UC 15175.2/1 | PRS LED 230 V AC 15142.2/1 | PRS LED 230 V AC 15142.2/1 |
| Status display with free-wheel diode | Status display | Status display | Status display | Status display | Status display |
| 60 to 110 V DC | 110 to 230 V AC | 12 to 48 V AC/DC | 12 to 48 V AC/DC | 110 to 230 V AC | 110 to 230 V AC |

Socket base

| | | | | | |
|---|---|---|---|---|---|
| PRS 4 Z 15431.2/1 | PRS 4 Z 15431.2/1 | PRS 4 Z 15431.2/1 | PRS 4 Z 15431.2/1 | PRS 4 Z 15431.2/1 | PRS 4 Z 15431.2/1 |
| TS 35 | TS 35 | TS 35 | TS 35 | TS 35 | TS 35 |
| 2.8 mm fast-on | 2.8 mm fast-on | 2.8 mm fast-on | 2.8 mm fast-on | 2.8 mm fast-on | 2.8 mm fast-on |
| Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection | Tension-spring connection |
| 12 A 300 V > 2500 Veff C/250 V -25 to +70°C IP 20 V-0 VBG 4 2 x 0.2-1.5 mm ² 2 x 0.2-0.75 mm ² 7 mm UL/CSA | 12 A 300 V > 2500 Veff C/250 V -25 to +70°C IP 20 V-0 VBG 4 2 x 0.2-1.5 mm ² 2 x 0.2-0.75 mm ² 7 mm UL/CSA | 12 A 300 V > 2500 Veff C/250 V -25 to +70°C IP 20 V-0 VBG 4 2 x 0.2-1.5 mm ² 2 x 0.2-0.75 mm ² 7 mm UL/CSA | 12 A 300 V > 2500 Veff C/250 V -25 to +70°C IP 20 V-0 VBG 4 2 x 0.2-1.5 mm ² 2 x 0.2-0.75 mm ² 7 mm UL/CSA | 12 A 300 V > 2500 Veff C/250 V -25 to +70°C IP 20 V-0 VBG 4 2 x 0.2-1.5 mm ² 2 x 0.2-0.75 mm ² 7 mm UL/CSA | 12 A 300 V > 2500 Veff C/250 V -25 to +70°C IP 20 V-0 VBG 4 2 x 0.2-1.5 mm ² 2 x 0.2-0.75 mm ² 7 mm UL/CSA |

Holding clamp

| | | | | | |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 | PRS C 4 15140.2/1 |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|

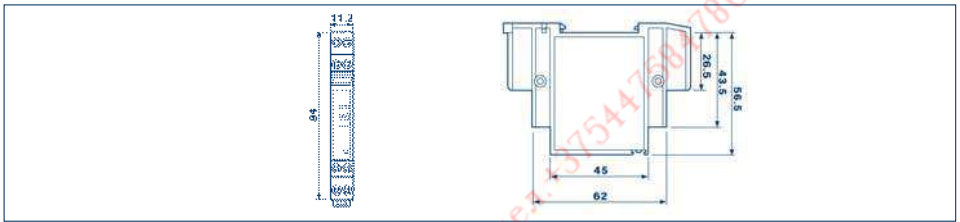
Auto-Off-On Relay RM/HA/24 VUC

- Mount on TS 35
- Installation design, width 11.2 mm
- IP 20 protection
- Screw connections protected against accidental contact, according to VBG 4
- Switch for HAND/OFF/AUTOMATIC operation
- LED for indicating the switching status
- Basic insulation, according to VDE 0435/EN 61810-1

RM/HA/24 VUC



Dimensions



| | | |
|--|--|---------------|
| Type | RM/HA/24 VUC | |
| Cat. no./Qty. | 15561.2/1 | |
| Size (L x W x H) with TS 35 x 7.5 | 84 x 11.2 x 64 mm | |
| Weight | 45 g | |
| General information | | |
| Insulation properties | | |
| DIN-VDE specifications | DIN EN 50178; DIN VDE 0110, pollution degree 2, overvoltage category III | |
| Dielectric strength of coil/contacts (1.2/50 μs) | 4 kV | |
| Dielectric strength between mains voltage and contacts | 3,000 V AC | |
| with open contact | 1000 V AC | |
| Operating temperature | -10 to +50°C | |
| Relay protection type | IP 20 | |
| Insulation stripping length | 7 mm | |
| Max. connection cross-section for screw-clamp | solid core | stranded |
| mm ² | 1 x 6/2 x 2.5 | 1 x 4/2 x 1.5 |
| AWG | 1 x 10/2 x 14 | 1 x 12/2 x 16 |
| Torque | 0.5 Nm | |
| Ambient heat dissipation without contact current | 0.4 W | |
| with continuous current | 1.8 W | |
| Coil input data | | |
| Rated voltage (UN) | 24 V AC/DC | |
| Power rating AC/DC | 0.6 VA (50 Hz) / 0.4 W | |
| Operating range | 19.2 V to 26.4 V AC/DC | |
| Contacts output data | | |
| Number of contacts | 1 CO contact | |
| Max continuous current/max inrush current | 10 A/15 A | |
| Rated voltage/max. switching voltage | 250/400 V AC | |
| Max. power rating AC 1 | 2500 VA | |
| Max. power rating AC 15 (230 V AC) | 500 VA | |
| 1-phase motor load, AC 3 - operation (230 V AC) | 0.44 kW | |
| Max. switching current DC 1: 30/110/220 V | 10 A/0.3 A/0.12 A | |
| Min. switching load | 300 mW (5 V/5 mA) | |
| Contact material | AgSnO 2 | |
| Mechanical life span | 10 x 10 ⁶ switching cycles | |
| Electrical life span AC 1 | 100 x 10 ³ switching cycles | |
| Contact data | | |
| Permissible contact load of glow lamps (230 V) | 1000 W | |
| Fluorescent lamps, compensated (230 V) | 350 W | |
| Fluorescent lamps, uncompensated (230 V) | 500 W | |
| Halogen lamps (230 V) | 1000 W | |

Auto-Off-On Relay RM/HA/24 VUC

Circuit diagram

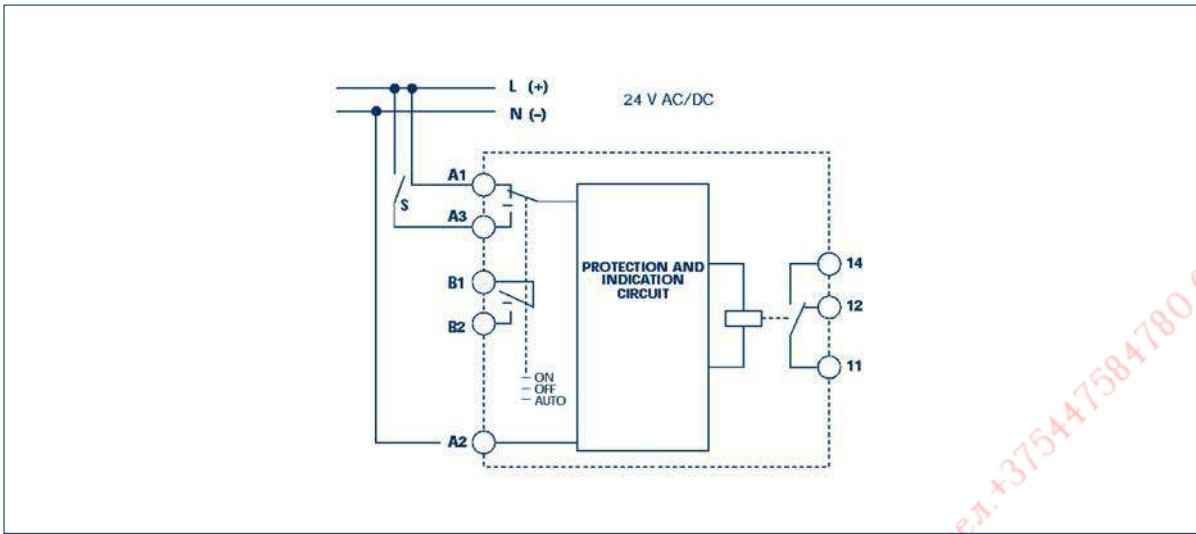


Table of functions

| Changeover contact | Controller output (S) | Output relay | LED | B 1 - B 2 check-back contact |
|--------------------|-----------------------|--------------|-----|------------------------------|
| AUTO | Closed | ON | ON | Closed |
| AUTO | Open | OFF | OFF | Closed |
| ON | - | ON | ON | Open |
| OFF | - | OFF | OFF | Open |

Functional principle

When the changeover contact is in the AUTO position, the check-back contact B1-B2 is closed. The LED is lit when the NO of the internal relay is closed.

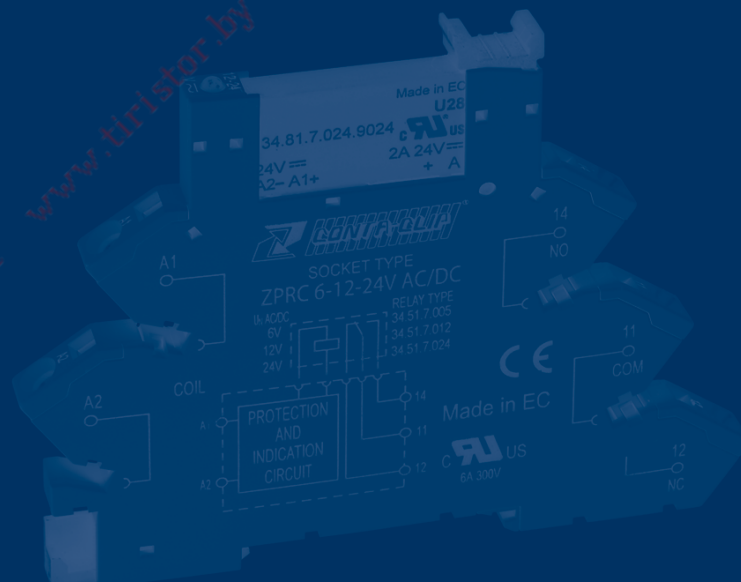
- AUTO = The output signal originating from the controller will be forwarded
- OFF = The actuator for restricting the control variable is turned off
- ON = The actuator for restricting the control variable is turned on independent from the controller

Opto-couplers | Solid-State

The unambiguous and secure separation of potentials in the different data and control signals - this is important for the trouble-free functioning of equipment and production facilities. The opto-coupler is to an increasing degree responsible for the coupling between sensor and controls, or controls and actuators.

The opto-coupler offers several other advantages over mechanical relay couplers, in addition to the electrical isolation of input and output circuits. This includes a high switching frequency, a high repetition accuracy, a long life span, and resistance to shock.

CONTA-CLIP offers opto-couplers in a variety of voltages and power ranges. In order to suit industrial applications, these modules and components are provided with the appropriate protective input circuitry.





Solid-state compact PSC

The **PSC** solid-state compact distinguishes itself by its compact shape in the terminal block design. Thanks to their thin form (6.2 mm) and a switchable continuous current of 2 amps, these solid-state modules can be integrated into a mounted-rail control design where space is tight. And owing to their features of secure electrical isolation of circuits and the multiplication of contacts, these modules are well-suited for use in automation engineering. The solid-state components offer a total of 8 varieties, including screw and tension-spring, and are available with input voltages from 24 to 60 VDC and 240 VAC. With the AQI cross-connection system, mutual potentials can be carried out over the coil or contact sides. Excellent equipment identification is possible since the socket base has a labelling surface for the standard PMC BSTR 6/30 marking system. **CONTA-CLIP** also offers a customer-specific labelling service, in addition to the standard marking.



Solid state relay modules CMS-SSR

The **CMS-SSR** two-way solid state relay module has universal AC / DC inputs and outputs that mean every possible combinations is achievable. The voltage drop to the outputs is extremely low, even at maximum operating load. Resulting in minimal heating in the local environment. Both channels of the module are identical and have a yellow LED to indicate the switch status.

Solid-state compact PSC

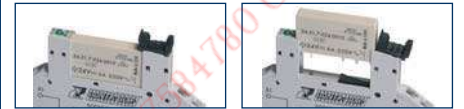
Solid-state terminals

1. Overview

a Labelling | Marking
The socket bases have a labelling surface which is optimally suited for our **PMC Pocket-Maxicard** standard marking systems. In addition to our large variety of standard labels, **CONTA-CLIP** can also provide "just-in-time" individual labelling for you.



b Using the mount/dismount lever
The mounting and dismounting mechanism forms a reliable connection by latching the relay with the socket base. The fitted relay can be removed, easily and without force, from the socket base by using the dismount function of the lever!



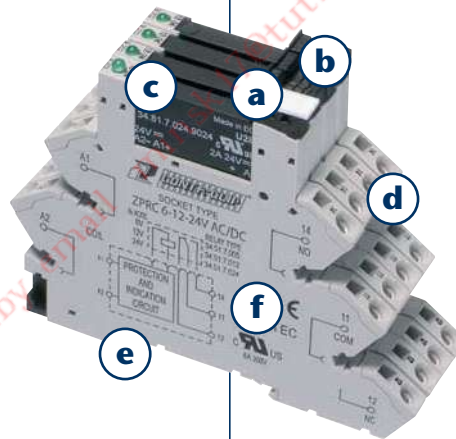
c Pluggable solid-state modules
Solid-state modules are also available with various input and output voltages to fit your individual requirements!



Converting switching relays to solid-state modules

Relay terminals can be later converted to solid-state terminal, in cases of high expected electrical life spans and in order to avoid the influence of contact-material migration (with DC).

| Socket base | Input | Output | Solid-state relays |
|------------------|---------|------------|-------------------------|
| ZPRC 6-12-24V DC | 24V DC | 2A 24V DC | PSC 1/24V/DC-24V/2A/DC |
| ZPRC 60V DC | 60V DC | 2A 24V DC | PSC 1/60V/DC-24V/2A/DC |
| ZPRC 230V AC | 230V AC | 2A 24V DC | PSC 1/60V/DC-24V/2A/DC |
| ZPRC LW 230V AC | 230V AC | 2A 24V DC | PSC 1/60V/DC-24V/2A/DC |
| ZPRC 6-12-24V DC | 24V DC | 2A 230V AC | PSC 1/24V/DC-240V/2A/AC |
| ZPRC 60V DC | 60V DC | 2A 230V AC | PSC 1/60V/DC-240V/2A/AC |
| ZPRC 230V AC | 230V AC | 2A 230V AC | PSC 1/60V/DC-240V/2A/AC |
| ZPRC LW 230V AC | 230V AC | 2A 230V AC | PSC 1/60V/DC-240V/2A/AC |
| PRC 6-12-24V DC | 24V DC | 2A 24V DC | PSC 1/24V/DC-24V/2A/DC |
| PRC 60V DC | 60V DC | 2A 24V DC | PSC 1/60V/DC-24V/2A/DC |
| PRC 230V AC | 230V AC | 2A 24V DC | PSC 1/60V/DC-24V/2A/DC |
| PRC LW 230V AC | 230V AC | 2A 24V DC | PSC 1/60V/DC-24V/2A/DC |
| PRC 6-12-24V DC | 24V DC | 2A 230V AC | PSC 1/24V/DC-240V/2A/AC |
| PRC 60V DC | 60V DC | 2A 230V AC | PSC 1/60V/DC-240V/2A/AC |
| PRC 230V AC | 230V AC | 2A 230V AC | PSC 1/60V/DC-240V/2A/AC |
| PRC LW 230V AC | 230V AC | 2A 230V AC | PSC 1/60V/DC-240V/2A/AC |



d Pluggable external cross-connections
The AQI/PRC pluggable cross-connection system enables a time-saving distribution of potentials. The AQI/PRC is constructed so that it is protected against accidental touch. It is available as a 20-pole unit, in either yellow, blue or black. The cross-connector can be shortened to fewer poles in order to fit the required interface. Insulation plating can be used to insulate the ends.



e Mounts on standard TS 35 rail
CONTA-CLIP relay terminals can be flexibly mounted on standard TS 35 mounting rails, according to EN 50035 and EN 50022.

f Connection types
All of our relay terminals are optionally available with screw or tension-spring connection systems.



2. Approvals (Details upon request.)



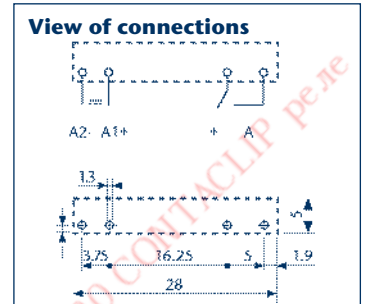
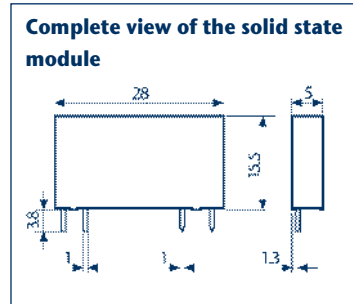
Solid-state compact PSC

Solid-state terminals

3. Features

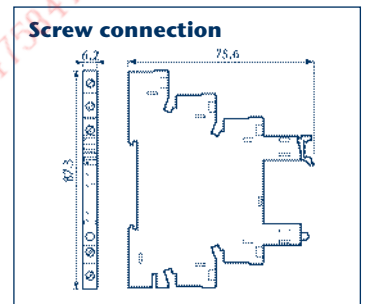
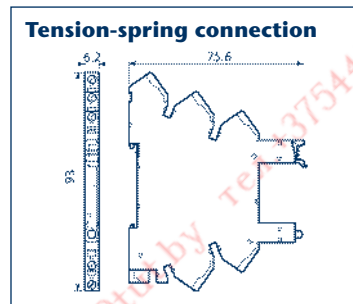
I. Solid-state module

- 5 mm width, very thin solid-state module, semi-conductor relay
- For DC or AC loads, without contact-material erosion
- For high numbers of switching cycles



II. Socket base

- Mount on TS 35
- Very flexible and modular construction of individual solid-state module base
- User-friendly, because the solid-state modules can be easily replaced
- High-quality connecting terminals (tension-spring or screw connection system)
- Integrated EMC input circuitry, and LED
- High-quality innovative mount/dismount lever
- All versions are optionally available with screw or tension-spring connection system



4. Specifications

Opto-coupler, semi-conductor relay, SSR

Additional data

| | | |
|--------------------------|---------------------------|--|
| Ambient heat dissipation | without output current W | 0.2... 0.5 at ZPRCU LW 1/240 V DC and PRCU LW 1/240 V DC |
| | at rated output current W | 0.4... 0.9 at ZPRCU LW 1/240 V DC and PRCU LW 1/240 V DC |

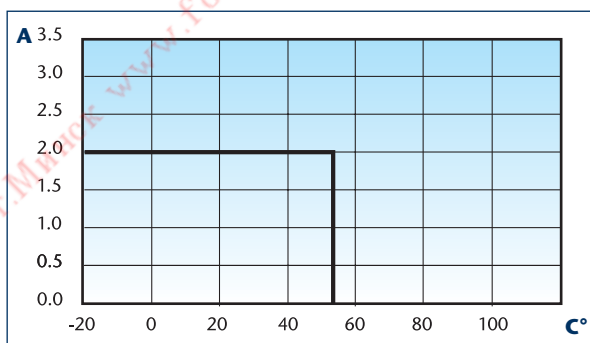
5. Input specification

DC version

| Rated voltage | Input code | Operating range | | Drop-out voltage | Rated current | Power rating |
|---------------|------------|-----------------|----------------|------------------|---------------|--------------|
| U_N V | | U_{min} V | U_{max} V | U V | I mA | P W |
| 24 | – | 16.8 | 30 | 10 | 10.5 | – |
| 230... 240 AC | – | 184 | 264 | 72 | 5.6 (*) | 0.5 (*) |





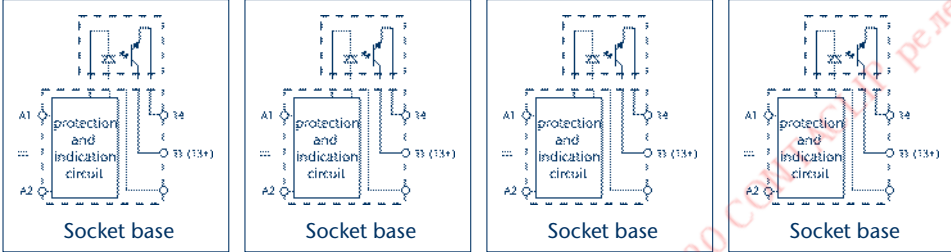
* Rated current and power at $U_N = 240$ V.

6. Output specification



Continuous current, dependent on the ambient temperature. SSR with 2 A, DC or AC

Solid-state compact PSC

| | PSCU 1/24 V DC/24 V DC | PSCU 1/24 V DC/24 V AC | PSCU 1/240 V AC/24 V DC | PSCU 1/240 V AC/240 V AC |
|---|---|--|---|---|
| Solid-state terminals, screw-connection |  |  |  |  |
| consisting of: | <ul style="list-style-type: none"> • A basic terminal and a pluggable solid state module • Mount on TS 35 | | | |
| Circuit diagram |  | | | |
| Type | PSCU 1/24 V DC/24 V DC | PSCU 1/24 V DC/240 V AC | PSCU 1/240 V AC/24 V DC | PSCU 1/240 V AC/240 V AC |
| Cat. no./Qty. | 15530.2/10 | 15529.2/10 | 15532.2/10 | 15531.2/10 |
| Type/Colour grey (RAL 7032) | | | | |
| Size (L x W x H) with TS 35 x 7.5 | 87.3 x 6.2 x 79.9 mm | 87.3 x 6.2 x 79.9 mm | 87.3 x 6.2 x 79.9 mm | 87.3 x 6.2 x 79.9 mm |
| Weight | 36 g | 36 g | 36 g | 36 g |
| Rated operating voltage | 24 V DC | 24 V DC | 230 V AC | 230 V AC |
| General information | | | | |
| Response time/Release time | 0.1/0.4 ms | 12/12 ms | 0.1/0.4 ms | 12/12 ms |
| Dielectric strength of control/load circuit | 2,500 V | 2,500 V | 2,500 V | 2,500 V |
| Ambient temperature | -20 to +55 °C | -20 to +55 °C | -20 to +55 °C | -20 to +55 °C |
| Relay protection type | RT III | RT III | RT III | RT III |
| Ratings for socket base | | | | |
| Ambient temperature | -20 to +55 °C | -20 to +55 °C | -20 to +55 °C | -20 to +55 °C |
| Insulation stripping length | 10 mm | 10 mm | 10 mm | 10 mm |
| Max. connection cross-section, solid flexible | 1 x 2.5 1 x 2.5 mm ² 1 x 14 1 x 14 mm ² | 1 x 2.5 1 x 2.5 mm ² 1 x 14 1 x 14 mm ² | 1 x 2.5 1 x 2.5 mm ² 1 x 14 1 x 14 mm ² | 1 x 2.5 1 x 2.5 mm ² 1 x 14 1 x 14 mm ² |
| Input circuit | | | | |
| Rated voltage | 24 V DC | 24 V DC | 230 V DC | 230 V DC |
| Power rating | 0.2 W | 0.2 W | 0.9 W | 0.9 W |
| Operating range | 16 to 30 V DC | 16 to 30 V DC | 184 to 264 V DC | 184 to 264 V DC |
| Control current | 10.5 mA DC | 10.5 mA DC | 5.6 mA DC | 5.6 mA DC |
| Drop-out voltage | 10 AC/DC | 10 AC/DC | 20 AC/DC | 20 AC/DC |
| Input resistance | 3,200 Ω | 3,200 Ω | 21,300 Ω | 21,300 Ω |
| Ratings for solid-state module combined with socket base | | | | |
| Output circuit | | | | |
| Output | 1 NO contact | 1 NO contact | 1 NO contact | 1 NO contact |
| Max. continuous current Max. inrush current (10ms) | 2/20 A | 2/40 A | 2/20 A | 2/40 A |
| Rated voltage Max. reverse voltage | (24/33) V AC DC | (240/275) V AC | (24/33) V AC DC | (240/275) V AC |
| Switching load-voltage range | 1.5 to 24 V DC | 12 to 240 V AC | 1.5 to 24 V DC | 12 to 240 V AC |
| Min. switching current | 1 mA | 22 mA | 1 mA | 22 mA |
| Max. residual current at 55°C | 0.001 mA | 1.5 mA | 0.001 mA | 1.5 mA |
| Max. voltage drop at 20°C and rated current | 0.12 V | 1.6 V | 0.12 V | 1.6 V |
| Individual components, socket base | | | | |
| Type/Colour grey (RAL 7032) | | | | |
| Cat. no./Qty. | PRC 6-12-24 V DC 15490.2/10 | PRC 6-12-24 V DC 15490.2/10 | PRC 220 ... 240 V AC/DC 15489.2/10 | PRC 220 ... 240 V AC/DC 15489.2/10 |
| Individual components, solid-state module | | | | |
| Type/colour | | | | |
| Cat. no./Qty. | PSC 1/24 V DC-240 V/2 A/DC 15505.2/10 | PSC 1/24 V DC-240 V/2 A/AC 15504.2/10 | PSC 1/60 V DC-24 V/2 A/DC 15507.2/10 | PSC 1/60 V/DC-240 V/2 A/AC 15506.2/10 |
| Accessories AQI/PRC external insulated cross-connector | | | | |
| Cat. no./Qty. | AQI/PRC/20 15545.8/1 | AQI/PRC/20 15545.8/1 | AQI/PRC/20 15545.8/1 | AQI/PRC/20 15545.8/1 |
| | 15545.5/1 | 15545.5/1 | 15545.5/1 | 15545.5/1 |
| | 15545.4/1 | 15545.4/1 | 15545.4/1 | 15545.4/1 |
| TW/PRC partition | | | | |
| Cat. no./Qty. | TW/PRC 15546.2/1 | TW/PRC 15546.2/1 | TW/PRC 15546.2/1 | TW/PRC 15546.2/1 |
| PMC labelling/markers | | | | |
| Cat. no./Qty. , standard print, see catalog | PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 | PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 | PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 | PMC BSTR 6/30 CONTA-CONNECT 9106.7/300 |
| | 9107.7/300 | 9107.7/300 | 9107.7/300 | 9107.7/300 |
| | 9107.7/300 | 9107.7/300 | 9107.7/300 | 9107.7/300 |
| SDB screwdriver | | | | |
| Cat. no./Qty. | SDB 0.6 x 3.5 1086.0/1 | SDB 0.6 x 3.5 1086.0/1 | SDB 0.6 x 3.5 1086.0/1 | SDB 0.6 x 3.5 1086.0/1 |

Solid-state compact PSC

Solid-state terminals, tension-spring connection **ZPSCU 1/24 V DC/24 V DC** **ZPSCU 1/24 V DC/240 V AC** **ZPSCU 1/240 V AC/24 V DC** **ZPSCU 1/240 V AC/240 V AC**

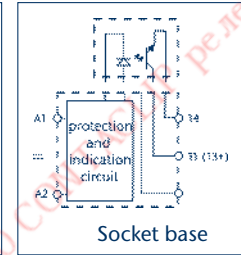
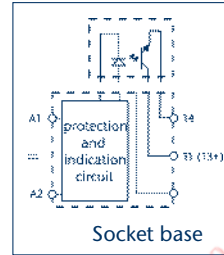
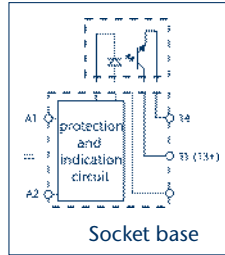
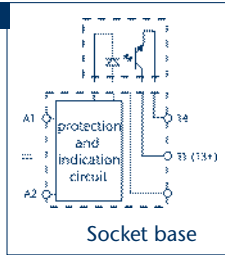
consisting of:

- A basic terminal and a pluggable solid state module
- Mount on TS 35



Circuit diagram

- Internal EMC coil circuitry and LED display



| Type | ZPSCU 1/24 V DC/24 V DC | ZPSCU 1/24 V DC/240 V DC | ZPSCU 1/240 V AC/24 V DC | ZPSCU 1/240 V AC/240 V AC |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Cat. no./Qty. Type/Colour grey (RAL 7032) | 15534.2/10 | 15533.2/10 | 15543.2/10 | 15535.2/10 |
| Size (L x W x H) with TS 35 x 7.5 | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm |
| Weight | 36 g | 36 g | 36 g | 36 g |
| Rated operating voltage | 24 V DC | 24 V DC | 230 V AC | 230 V AC |
| General information | | | | |
| Response time/Release time | 0.1/0.4 ms | 12/12 ms | 0.1/0.4 ms | 12/12 ms |
| Dielectric strength of control/load circuit | 2,500 V | 2,500 V | 2,500 V | 2,500 V |
| Ambient temperature | -20 to +55 °C | -20 to +55 °C | -20 to +55 °C | -20 to +55 °C |
| Relay protection type | RT III | RT III | RT III | RT III |
| Ratings for socket base | | | | |
| Ambient temperature | -20 to +55 °C | -20 to +55 °C | -20 to +55 °C | -20 to +55 °C |
| Insulation stripping length | 10 mm | 10 mm | 10 mm | 10 mm |
| Max. connection cross-section, solid flexible | 1 x 2.5/2 x 1.5 1 x 2.5/2 x 1.5 | 1 x 2.5/2 x 1.5 1 x 2.5/2 x 1.5 | 1 x 2.5/2 x 1.5 1 x 2.5/2 x 1.5 | 1 x 2.5/2 x 1.5 1 x 2.5/2 x 1.5 |
| | mm ² | | | |
| | AWG | | | |
| | 1 x 14/2 x 16 1 x 14/2 x 16 | 1 x 14/2 x 16 1 x 14/2 x 16 | 1 x 14/2 x 16 1 x 14/2 x 16 | 1 x 14/2 x 16 1 x 14/2 x 16 |
| Input circuit | | | | |
| Rated voltage | 24 V DC | 24 V DC | 230 V DC | 230 V DC |
| Power rating | 0.2 W | 0.2 W | 0.9 W | 0.9 W |
| Operating range | 16 to 30 V DC | 16 to 30 V DC | 184 to 264 V DC | 184 to 264 V DC |
| Control current | 10.5 mA DC | 10.5 mA DC | 5.6 mA DC | 5.6 mA DC |
| Drop-out voltage | 10 V DC | 10 V DC | 72 V DC | 72 V DC |
| Input resistance | 3200 Ω | 3200 Ω | 43,000 Ω | 43,000 Ω |
| Ratings for solid-state module combined with socket base | | | | |
| Output circuit | | | | |
| Output | 1 NO contact | 1 NO contact | 1 NO contact | 1 NO contact |
| Max. continuous current Max. inrush current (10ms) | 2/20 A | 2/40 A | 2/20 A | 2/40 A |
| Rated voltage Max. reverse voltage | (24/33) V AC DC | (240/275) V AC | (24/33) V AC DC | (240/275) V AC |
| Switching load-voltage range | 1.5 to 24 V DC | 12 to 240 V AC | 1.5 to 24 V DC | 12 to 240 V AC |
| Min. switching current | 1 mA | 22 mA | 1 mA | 22 mA |
| Max. residual current at 55°C | 0.001 mA | 1.5 mA | 0.001 mA | 1.5 mA |
| Max. voltage drop at 20°C and rated current | 0.12 V | 1.6 V | 0.12 V | 1.6 V |

Individual components, socket base

| Type/Colour grey (RAL 7032) | ZPRC 6-12-24 V DC | ZPRC 6-12-24 V DC | ZPRC 220 ... 240 V AC/DC | ZPRC 220 ... 240 V AC/DC |
|-----------------------------|-------------------|-------------------|--------------------------|--------------------------|
| Cat. no./Qty. | 15494.2/10 | 15494.2/10 | 15493.2/10 | 15493.2/10 |

Individual components, solid-state module

| Type/Colour | PSC 1/24 V DC-24 V/2 A/DC | PSC 1/24 V DC-240 V/2A/AC | PSC 1/60 V/DC-24 V/2A/DC | PSC 1/60 V/DC-240 V/2A/AC |
|----------------------|---------------------------|---------------------------|--------------------------|---------------------------|
| Cat. no./Qty. | 15505.2/10 | 15504.2/10 | 15507.2/10 | 15506.2/10 |

Accessories AQI/PRC external insulated cross-connector

| AQI/PRC/20 | AQI/PRC/20 | AQI/PRC/20 | AQI/PRC/20 |
|-----------------------------|------------------|------------------|------------------|
| Cat. no./Qty. yellow | 15545.8/1 | 15545.8/1 | 15545.8/1 |
| Cat. no./Qty. blue | 15545.5/1 | 15545.5/1 | 15545.5/1 |
| Cat. no./Qty. black | 15545.4/1 | 15545.4/1 | 15545.4/1 |

TW/PRC partitions

| TW/PRC | TW/PRC | TW/PRC | TW/PRC |
|----------------------|------------------|------------------|------------------|
| Cat. no./Qty. | 15546.2/1 | 15546.2/1 | 15546.2/1 |

PMC labelling/markers

| PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 | PMC BSTR 6/30 |
|--|-------------------|-------------------|-------------------|
| Cat. no./Qty. , standard print, see catalog | CONTA-CONNECT | CONTA-CONNECT | CONTA-CONNECT |
| Cat. no./Qty. neutral | 9106.7/300 | 9106.7/300 | 9106.7/300 |
| Cat. no./Qty. , special print | 9107.7/300 | 9107.7/300 | 9107.7/300 |

BWMA metal tool

| BWMA 1 | BWMA 1 | BWMA 1 | BWMA 1 |
|----------------------|-----------------|-----------------|-----------------|
| Cat. no./Qty. | 3808.0/1 | 3808.0/1 | 3808.0/1 |

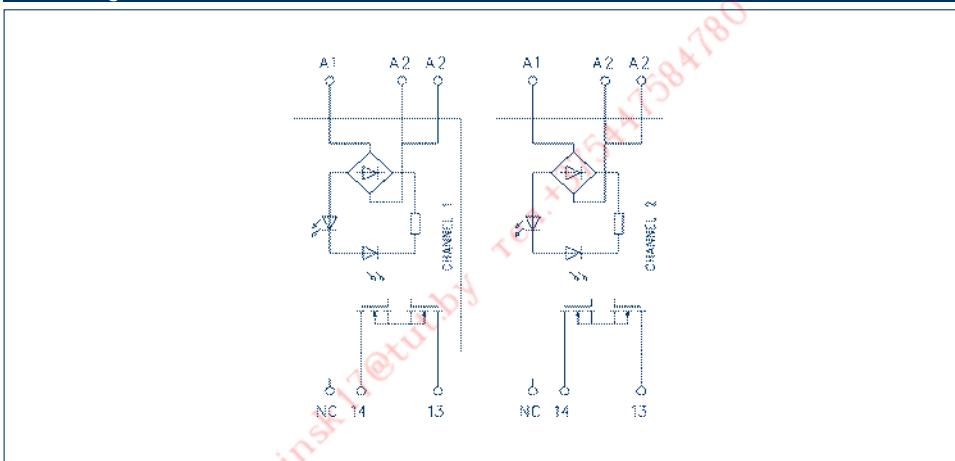
Solid state relay modules CMS-SSR

- Mounts on TS35
- Compact design, width: 17.5 mm
- Electrical isolation
- Input and output screw connection
- Input AC / DC
- Output AC / DC
- AC/AC - AC/DC - DC/DC - DC/AC operation possible
- Max. output current 24 A per channel
- very small output voltage drop

CMS-SSR24A



Circuit diagram



TYPE

Cat. no./Qty.
Size (L x W x H) with TS 35 x 7.5
Weight

DIN-VDE specifications
Electromagnetic properties
Operating temperature
Storage temperature
Connection type
Connection cross-section
Screw connection
Stripping length
Mounting position
Mounting interval
Current on both channels < 32 A
Current on both channels > 32 A

Input data

Channels
Rated voltage
Working range DC
Working range AC

Output details per channel

Output
Max. continuous current
Voltage range DC
Voltage range AC
Voltage drop at max. load current
Leakage current 25°C
Dielectric strength of control/load circuit
Response time
Release time
Max. switching frequency
Indicator

CMS-SSR24A

16038.2 / 1
17.5 x 99 x 114.5 mm
106g
DIN EN 50178:1987 ; DIN VDE 0110, contamination degree 2, overvoltage category III
EMC Directive 2004/108/EC, in compliance with EN 55011 and EN 61326-1
0 to +50°C
-25 °C to +70°C
Screw connection
0.2–2.5mm²
AWG 22-14
12mm
horizontal
0 mm
20 mm

2
24V AC / DC
9 to 36 V / 10 mA
10 to 26.4 V / 20 mA
1 Normally open contact
24 A
0 to 50 V
0 to 30 V
120 mV
< 60 µA
2.5 kV, 50 Hz, 1 min.
< 15 ms
< 10 ms
2 Hz
yellow LED

| | |
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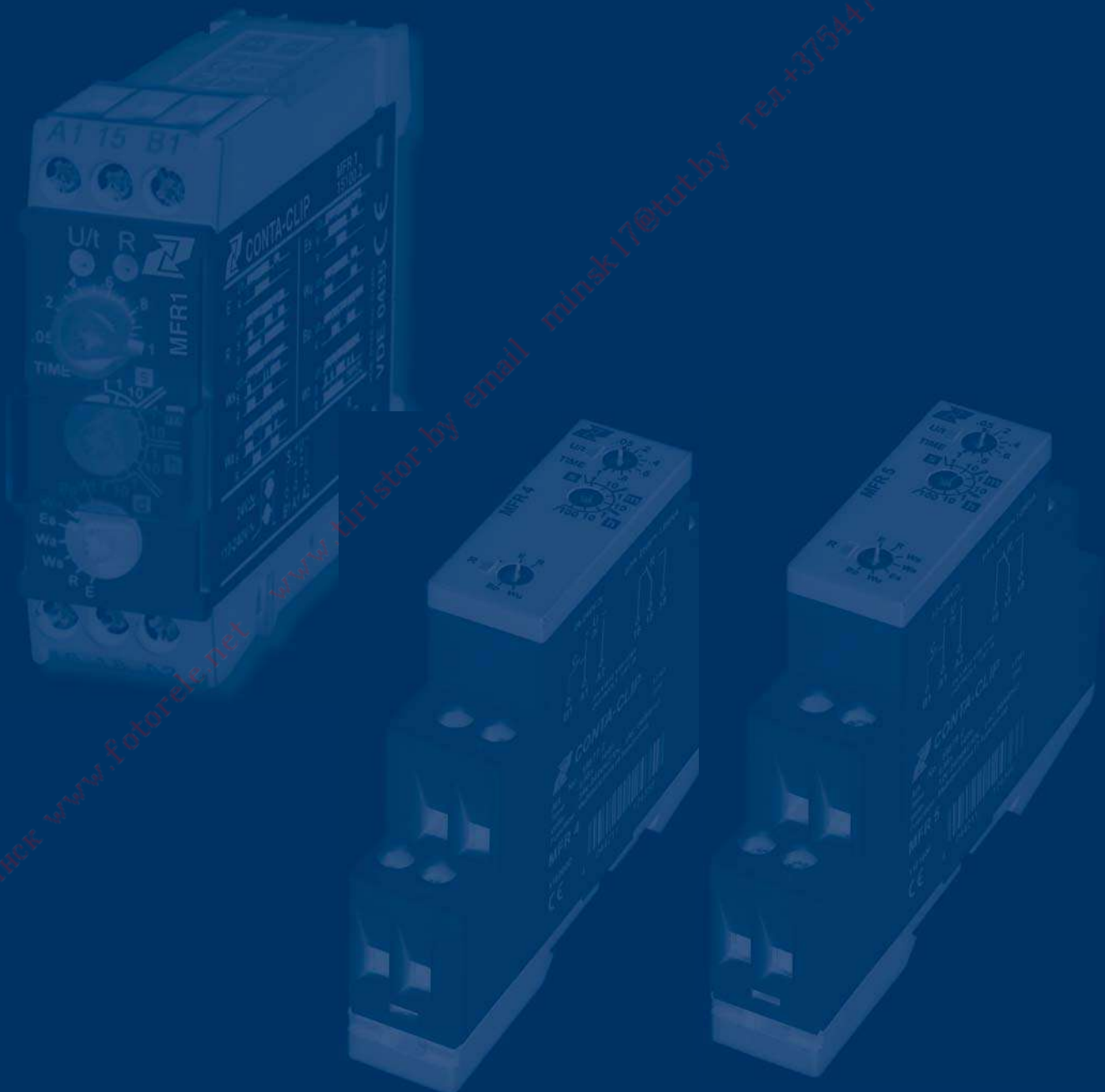
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Functional Relays

Small control tasks often arise in automation engineering applications. These new functional relays were developed in order to accomplish these tasks as simply as possible. The small size and great flexibility of these relays allows them to be used in many different applications.



Functional Relays



Multi-function timing relay terminal MFR-PRC

The narrow housing of the new MFR-PRC timing relay allows them to be used in very confined spaces. With their minimal width of only 6.2 mm, they open up new possibilities in designing control schemes. Their relay-terminal design makes them very flexible and gives you enormous potential for savings. The bases are compatible with the PRC relay system and can thus be easily integrated.



MFR 1 | MFR 4 | MFR 5 Multi-functional timing relays

Instead of timing units with only one function, these units offer the affordable possibility to implement several common time functions, such as ON-delay, impulse-ON, impulse-OFF, or pulse-monitoring. They reduce storage costs, since only one unit is needed for all applications.



Clock-pulse generator dual-time relay MFR 6

This functional component is equipped with a definable variable-time flash function. The output relay is controlled in accordance with both set times, until the supply voltage is interrupted. You can select operation - either beginning with pulse or beginning with delay.

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Functional Relays



TSR 1 | TSR 2 Staircase lighting time-limit switch

Electronic step-light time-limit switches with an advance-OFF warning function are functional relays that are often used in building installations. The device can be turned on by pressing the connected push-button. It can be turned off by holding the push-button down. The set time can be increased greatly by repeatedly pressing a push-button.



USR 1 | USR 2 Undervoltage-monitor relays

The undervoltage monitoring of alternating voltage in 3- or 1-phase supply systems can be accomplished with these functional components. They monitor the power supply and protect motors and other power-consuming modules from the effects of phase errors. Voltages that are too low or loss of phase can lead to system failures and as such represent an enormous potential for danger.

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Functional Relays



SDSR 1 | SDSR 2 Star-delta switching relays

Star-delta switching is a commonly used function in motor-control engineering. These timing relays were developed in order to accomplish this task as simply as possible. They can be used in different motor types because the transit time is adjustable.



VMR 1 | VMR 2 | VMR 3 Voltage monitoring relays

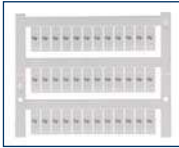
The voltage-monitoring relays conveniently monitor three-phase systems with and without a neutral wire. By precisely capturing characteristic values, they ensure the accessibility and reliability of a facility or machine. And in doing so, they deliver long-term added value. When operating facilities such as pumps and machines, it is critical to monitor the phase sequence, phase loss and asymmetry. Monitoring allows safe operation and prevents damage in a simple and efficient way.

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Multi-function timing relay terminal MFR-PRC

The narrow housing of the new **MFR-PRC** timing relay allows them to be used in very confined spaces. With their minimal width of only 6.2 mm, they open up new possibilities in designing control schemes. Their relay-terminal design makes them very flexible and gives you enormous potential for savings. The bases are compatible with the **PRC** relay system and can thus be easily integrated. Furthermore, they can be combined with familiar accessories such as jumpers and partitions, and they can be conveniently labelled with the **PMC BSTR** marking system from **CONTA-CLIP**.

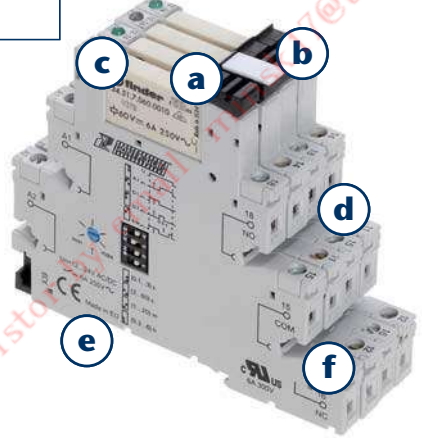
a Labeling | Marking
 The socket bases have a labeling surface which is optimally suited for our **PMC Pocket-Maxicard (PMC BSTR 6/30)** standard marking systems. In addition to our large variety of standard labels, **CONTA-CLIP** can also provide "just-in-time" individual labeling for you.




b Using the mount/dismount lever
 The mounting and dismounting mechanism forms a reliable connection by latching the relay with the socket base. The fitted relay can be removed, easily and without force, from the socket base by using the dismount function of the lever!



c Pluggable relays
 Pluggable relays are also available with AgSNO and gold contacts as well as solid-state modules with a variety of voltage inputs and outputs – to fit with the many functions of your individual requirements!


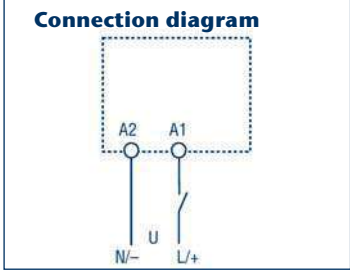
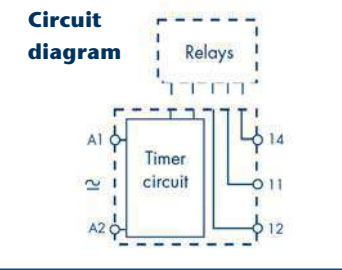
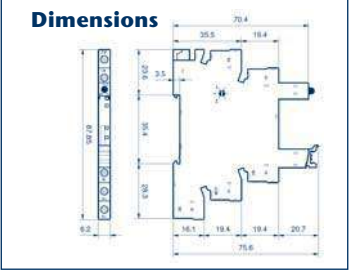



d Pluggable external cross-connections
 The **AQI / PRC** pluggable cross-connection system enables a time-saving distribution of potentials. The **AQI / PRC** is constructed so that it is protected against accidental touch. It is available as a 20-pole unit, in either yellow, blue or black. The cross-connector can be shortened to fewer poles in order to fit the required interface. Insulation plating can be used to insulate the ends.



e Mounts on standard TS 35 rail
CONTA-CLIP relay terminal can be flexibly mounted on standard TS 35 mounting rails according to EN 50035 and EN 50022.

f Connection type
 Screw connection system

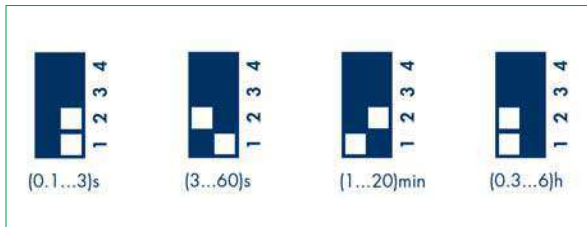



EMC specification

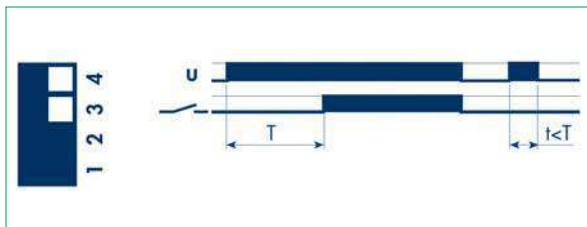
| Standard | Test | | Voltage |
|--------------|--|-------------------|---------|
| EN 61000-4-2 | Electrostatic discharge | Contact discharge | 4 kV |
| | | Air discharge | 8 kV |
| EN 61000-4-3 | Radio frequency electromagnetic field (80 ÷ 1000 MHz) | | 10 V/m |
| EN 61000-4-4 | Quick transients (bursts) (5-50 nS, 5 kHz) at input terminals | | 2 kV |
| EN 61000-4-5 | Surge (1.2/50 µs) at input terminals | Common mode | 2 kV |
| | | Differential mode | 1 kV |
| EN 61000-4-6 | Radio frequency common mode (0.15 ÷ 80 MHz at input terminals) | | 10 V |
| EN 55022 | Emissions class | | Class B |

Multi-function timing relay terminal MFR-PRC

Time ranges



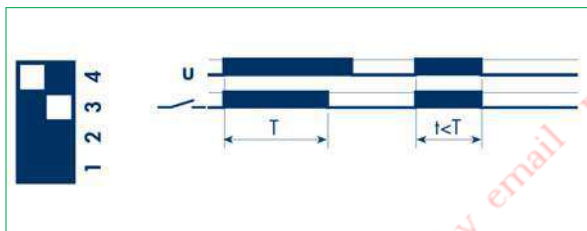
| LED | U | Output contact |
|-----|-----|---------------------|
| OFF | OFF | Open |
| OFF | ON | Open (time running) |
| ON | ON | Closed |



Functions

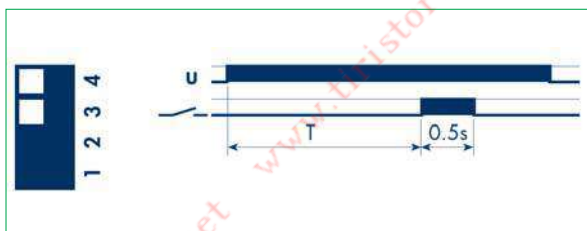
AI: ON delayed

Apply operating voltage to timing relay. The output contacts switch after the set time has expired. Reset takes place after the operating voltage is removed.



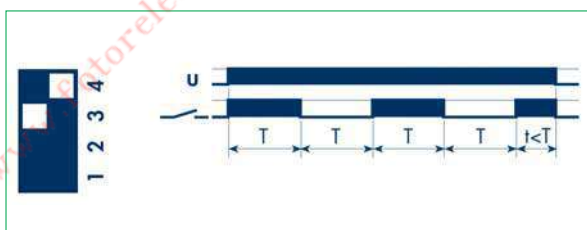
DI: ON pulse

Apply operating voltage to timing relay. The output contacts switch immediately. After the set time, the output contacts switch back.



GI: Fixed pulse (0.5 s) delayed

Apply operating voltage to timing relay. The output contacts switch after the set time has expired. Reset takes place after a fixed time of 0.5 s.



SW: Flashing ON beginning

Apply operating voltage to timing relay. The output contacts switch on immediately and flash at a defined interval until the input voltage is turned off. The time interval is 1:1 (time on = time off).

U = supply voltage

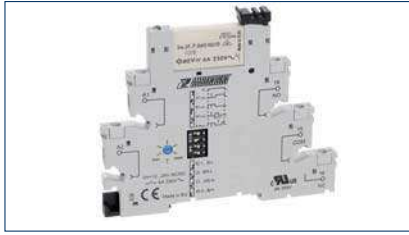
— = output contact

Multi-function timing relay terminal MFR-PRC

Screw-connection relay terminals

- consisting of:
 - Basic terminal and pluggable relay
 - Mount on TS 35

MFR PRCU 1/12 V AC/DC



MFR PRCU 1/24 V AC/DC



| Type | MFR PRCU 1/12 V AC/DC | MFR PRCU 1/24 V AC/DC |
|---|---|---|
| Cat. no./Qty. | 15952.2/1 | 15953.2/1 |
| Size (L x W x H) TS 35 | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm |
| Weight | 36 g | 36 g |
| Operating voltage | 12 V AC/DC | 24 V AC/DC |
| Individual parts | | |
| Socket base | | |
| Type | MFR PRC 12-24V AC/DC | MFR PRC 12-24V AC/DC |
| Cat. no./Qty. | 15951.2/10 | 15951.2/10 |
| Weight | 30 g | 30 g |
| Mounting foot for DIN rails | TS 35 | TS 35 |
| Functions | | |
| | AI: ON delayed DI: ON pulse GI: Fixed pulse (0.5s) delayed SW: Flashing (ON beginning) | AI: ON delayed DI: ON pulse GI: Fixed pulse (0.5s) delayed SW: Flashing (ON beginning) |
| Time delay range | | |
| | (0.1-3) s, (3-60) s, (1-20) min, (0.3-6) h | (0.1-3) s, (3-60) s, (1-20) min, (0.3-6) h |
| Displays | | |
| | LED = Position of output relay | LED = Position of output relay |
| Connection data | | |
| Connection type | Screw connection | Screw connection |
| Insulation stripping length | 10 mm | 10 mm |
| Tightening torque | 0.5 Nm | 0.5 Nm |
| Max. connection cross-section, solid flexible | 1x2.5/2x1.5 1x2.5/2x1.5 mm ² | 1x2.5/2x1.5 1x2.5/2x1.5 mm ² |
| Screw connection | 1x14/2x16 1x14/2x16 AWG | 1x14/2x16 1x14/2x16 AWG |
| Input data | | |
| Rated operating voltage | 12 V AC/DC | 24 V AC/DC |
| Rated output | 0.5 W | 0.5 W |
| Operating voltage range | 9.6 – 26.4 V AC/DC | 9.6 – 26.4 V AC/DC |
| Power loss | | |
| Without contact current | 0.1 W | 0.1 W |
| With rated contact current | 0.6 W | 0.6 W |
| Technical data | | |
| Time ranges | (0.1-3) s, (3-60) s, (1-20) min, (0.3-6) h | (0.1-3) s, (3-60) s, (1-20) min, (0.3-6) h |
| Repeat accuracy | ± 1 % | ± 1 % |
| Recovery time | ≤ 50 ms | ≤ 50 ms |
| Setting tolerance to end value | ± 5 % | ± 5 % |
| Ambient temperature | -40 to +70°C (EMR) / -40 to +55°C (SSR) | -40 to +70°C (EMR) / -40 to +55°C (SSR) |
| Relay | | |
| Type | PRC 1/12 V DC | PRC 1/24 V DC |
| Cat. no./Qty. | 15501.2/10 | 15502.2/10 |
| Weight | 6 g | 6 g |
| Ratings for plug-relay combined with socket base | | |
| Contacts | | |
| Number of contacts | 1 CO contacts | 1 CO contacts |
| Max. continuous current Max. inrush current | 6/10 A | 6/10 A |
| Rated voltage Max. switching voltage | 250/400 V AC* | 250/400 V AC* |
| Max. power rating AC 1 | 1,500 VA | 1,500 VA |
| Max. power rating AC 15 (230 V AC) | 300 VA | 300 VA |
| 1-phase motor load, AC 3 operation (230 V AC) | 0.185 kW | 0.185 kW |
| Max. switching current DC 1:30/110/220 V | 6/0.2/0.12 A | 6/0.2/0.12 AA |
| Min. switching load | 300 (5/5) mW (V/mA) | 300 (5/5) mW (V/mA) |
| Standard contact material | AgNi | AgNi |
| Coil | | |
| Rated voltage (UN) | 12 V AC/DC | 24 V AC/DC |
| Power rating AC/DC | 0.2 W | 0.2 W |
| Accessories external insulated cross-connector AQI/PRC | | |
| Cat. no./Qty., yellow | AQI/PRC/20 | AQI/PRC/8 |
| Cat. no./Qty., blue | 15545.8/1 | 15545.8/1 |
| Cat. no./Qty., black | 15545.5/1 | 15545.5/1 |
| | 15545.4/1 | 15545.4/1 |
| Partition TW/PRC | | |
| Cat. no./Qty.per pack | TW/PRC | TW/PRC |
| | 15546.2/1 | 15546.2/1 |
| Labeling/markers PMC | | |
| Cat. no./Qty.per pack, standard print, see catalog | MC BSTR 6/30 | MC BSTR 6/30 |
| Cat. no./Qty., blank | CONTA-CONNECT | CONTA-CONNECT |
| | 9106.7/300 | 9106.7/300 |
| Cat. no./Qty., special print | 9107.7/300 | 9107.7/300 |
| Tool / screwdriver SDB | | |
| Cat. no./Qty.per pack | SDB 0,6 x 3,5 | SDB 0,6 x 3,5 |
| | 1086.0/1 | 1086.0/1 |

*The conditions of pollution degree 2 are fulfilled at 400 V.

Multi-function timing relay terminal MFR-PSC

| Screw-connection solid-state terminals | | MFR PSCU 1/24V DC/24V DC | MFR PSCU 1/24V DC/240V DC |
|--|--|--|---|
| consisting of: <ul style="list-style-type: none"> Basic terminal and pluggable solid state module Mount on TS 35 | |  |  |
| Type | MFR PSCU 1/24V DC/24V DC | MFR PSCU 1/24V DC/240V DC | |
| Cat. no./Qty. | 15954.2/1 | 15955.2/1 | |
| Size (L x W x H) TS 35 | 93 x 6.2 x 79.9 mm | 93 x 6.2 x 79.9 mm | |
| Weight | 36 g | 36 g | |
| Rated operating voltage | 24 V AC/DC | 24 V AC/DC | |
| Individual parts | | | |
| Socket base | | | |
| Type | MFR PRC 12-24 V AC/DC | MFR PRC 12-24 V AC/DC | |
| Cat. no./Qty. | 15951.2/10 | 15951.2/10 | |
| Weight | 30 g | 30 g | |
| Mounting foot for DIN rails | TS 35 | TS 35 | |
| Functions | | | |
| | AI: ON delayed DI: ON pulse GI: Fixed pulse (0.5 s) delayed SW: Flashing (ON beginning) | AI: ON delayed DI: ON pulse GI: Fixed pulse (0.5 s) delayed SW: Flashing (ON beginning) | |
| Time delay range | | | |
| | (0.1-3) s, (3-60) s, (1-20) min, (0.3-6) h | (0.1-3) s, (3-60) s, (1-20) min, (0.3-6) h | |
| Displays | | | |
| | LED = Position of output relay | LED = Position of output relay | |
| Connection data | | | |
| Connection type | Screw connection | Screw connection | |
| Insulation stripping length | 10 mm | 10 mm | |
| Tightening torque | 0.5 Nm | 0.5 Nm | |
| Max. connection cross-section, solid flexible | 1x2.5/2x1.5 1x2.5/2x1.5 mm ² | 1x2.5/2x1.5 1x2.5/2x1.5 mm ² | |
| Screw connection | 1x14/2x16 1x14/2x16 AWG | 1x14/2x16 1x14/2x16 AWG | |
| Input data | | | |
| Rated operating voltage | 12 V AC/DC | 24 V AC/DC | |
| Rated output | 0.5 W | 0.5 W | |
| Operating voltage range | 9.6 – 26.4 V AC/DC | 9.6 – 26.4 V AC/DC | |
| Power loss | | | |
| Without contact current | 0.1 W | 0.1 W | |
| With rated contact current | 0.5 W | 0.5 W | |
| Technical data | | | |
| Time ranges | (0.1-3) s, (3-60) s, (1-20) min, (0.3-6) h | (0.1-3) s, (3-60) s, (1-20) min, (0.3-6) h | |
| Repeat accuracy | ± 1 % | ± 1 % | |
| Recovery time | ≤ 50 ms | ≤ 50 ms | |
| Setting tolerance to end value | ± 5 % | ± 5 % | |
| Ambient temperature | -40 to +70°C (EMR) / -40 to +55°C (SSR) | -40 to +70°C (EMR) / -40 to +55°C (SSR) | |
| Solid-state module | | | |
| Type | PSC 1/24V DC-24 V/2 A/AC | PSC 1/24V/DC-240 V/2 A/AC | |
| Cat. no./Qty. | 15505.2/10 | 15504.2/10 | |
| Weight | 6 g | 6 g | |
| Ratings for solid-state module combined with socket base | | | |
| Output circuit | | | |
| Output | 1 NO | 1 NO | |
| Max. continuous current Max. inrush current (10 ms) | 2/20 A | 2/40 A | |
| Rated voltage Max. reverse voltage | (24/33) V AC DC | (240/275) V AC | |
| Switching load-voltage range | 1.5 to 24 V DC | 12 to 240 V AC | |
| Min. switching current | 1 mA | 22 mA | |
| Max. residual current at 55°C | 0.001 mA | 1.5 mA | |
| Max. voltage drop at 20°C and rated current | 0.12 V | 1.6 V | |
| Accessories external insulated cross-connector AQI/PRC | | | |
| Cat. no./Qty. , yellow | AQI/PRC/20 15545.8/1 | AQI/PRC/20 15545.8/1 | |
| Cat. no./Qty. , blue | 15545.5/1 | 15545.5/1 | |
| Cat. no./Qty. , black | 15545.4/1 | 15545.4/1 | |
| Partition TW/PRC | TW/PRC 15546.2/1 | TW/PRC 15546.2/1 | |
| Labeling/markers PMC | MC BSTR 6/30 CONTA-CONNECT 9106.7/300 9107.7/300 | MC BSTR 6/30 CONTA-CONNECT 9106.7/300 9107.7/300 | |
| Tool / screwdriver SDB | SDB 0,6 x 3,5 1086.0/1 | SDB 0,6 x 3,5 1086.0/1 | |

Multi-functional timing relays MFR

MFR 1 | MFR 4 | MFR 5

Specifications

Mechanical design

- Mount on TS 35
- Housing made of self-extinguishing plastic, IP40 protection
- Any mounting position possible
- Screw connections protected against accidental touch, according to VBG 4, IP20 protection

Screw connection

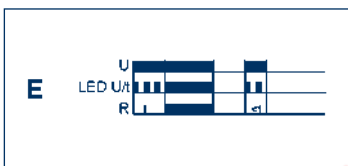
- 1 x 0.5 to 2.5 mm² with/without wire-end ferrules
- 1 x 4 mm² without wire-end ferrules
- 2 x 0.5 to 1.5 mm² with/without wire-end ferrules
- 2 x 2.5 mm² flexible without wire-end ferrules
- Tightening torque max. 1 Nm

Description of function

- The module must be disconnected from the power supply before selection of the timing function
- Please refer to data sheet or information printed on the module for a complete list of the various module functions

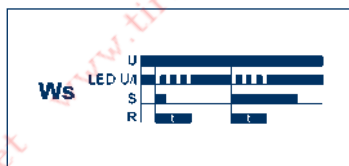
ON delay (E)

The set time t begins to run with the application of the supply voltage U . The green LED U/t flashes. After the time t has passed (the green LED U/t is lit), the output relay R goes on (yellow LED lit). This status is maintained until the supply voltage is interrupted. If the supply voltage is interrupted before the expiration of the time t , then the expired time is deleted and the time starts anew when the supply voltage is re-applied.



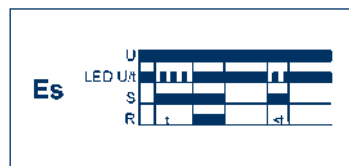
Impulse-ON with control contact (Ws)

The supply voltage U must constantly be applied to device (green LED U/t is lit). The output relay R activates (yellow LED lit) when the control contact S closes, and the set time t begins (green LED U/t flashes). After the time t has passed (green LED U/t is lit), the output relay deactivates (yellow LED not lit up). The control contact can be switched while the time is running. A further cycle can be started only when the currently running cycle is closed.



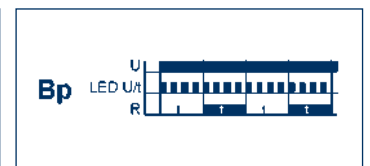
ON-delay with control contact (Es)

The supply voltage U must constantly be applied to device (green LED U/t is lit). The set time t begins when the control contact S is closed. The green LED U/t flashes. The output relay R activates (yellow LED is lit) after the expiration of the time t (green LED U/t is lit). This status is maintained until the control contact is opened. If the control contact is opened before the expiration of the time t , then the expired time is deleted and the time starts anew with the next cycle.



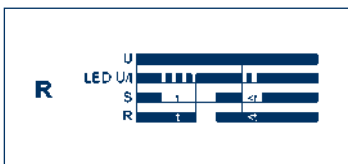
Flasher begin with delay (Bp)

The set time t begins to run with the application of the supply voltage U . The green LED U/t flashes. After the time t has passed, the output relay R goes on (the yellow LED lights up), and the set time t begins again. After the time t has passed, the output relay deactivates (yellow LED not lit). The output relay is controlled in a 1:1 ratio until the supply voltage is interrupted.



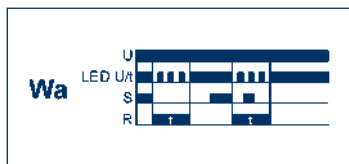
OFF-delay with control contact (R)

The supply voltage U must constantly be applied to device (green LED U/t is lit). The output relay R activates (yellow LED lit) when the control contact S closes. The set time t begins to run when the control contact S is opened. The green LED U/t flashes. The output relay R deactivates (yellow LED not lit) after the expiration of the time t (green LED U/t is lit). If the control contact is closed again before time t is expired, then the expired time is deleted and the time starts anew with the next cycle.



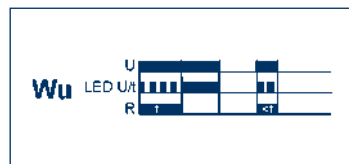
Impulse-OFF with control contact (Wa)

The supply voltage U must constantly be applied to device (green LED U/t is lit). The closure of control contact S has no influence on the positioning of the output relay R . When the control contact opens, the output relay activates (yellow LED is lit) and the set time t begins to run (green LED U/t flashes). The output relay R deactivates (yellow LED not lit) after the expiration of the time t (green LED U/t is lit). The control contact can be switched while the time is running. A further cycle can be started only when the currently running cycle is closed.



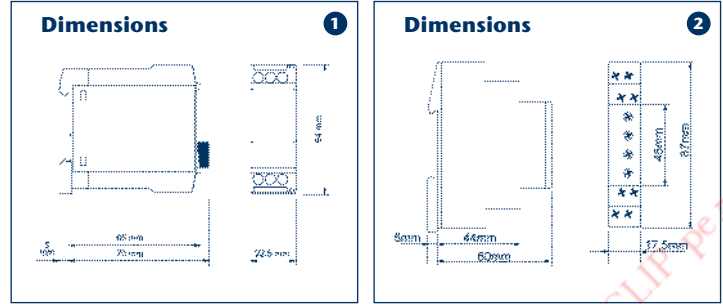
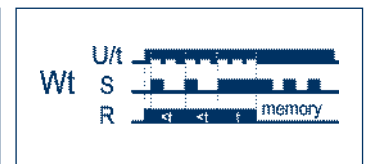
Impulse-ON voltage controlled (Wu)

The output relay R is activated (yellow LED lit) when the supply voltage is applied. The set time then begins to run (green LED U/t flashes). The output relay deactivates (yellow LED not lit) after the expiration of the time t (green LED U/t is lit). This status is maintained until the supply voltage is interrupted. If the supply voltage is interrupted before the time t expires, the the output relay is deactivated. The time that has already expired is deleted and when the supply voltage is re-applied the time is started anew.



Pulse monitoring (Wt)

The output relay R activates (yellow LED is lit) after the supply voltage is applied (green LED U/t is lit). The set time t begins when the control contact S is closed. The green LED U/t flashes. In order to keep the output relay activated, the control contact must be opened and then closed during the set time t . If this does not occur, the output relay is deactivated, and all further pulses to the control contact are ignored. In order to re-start this function, the supply voltage must be interrupted and re-applied.

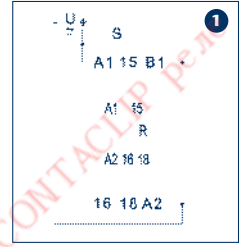


Environmental conditions

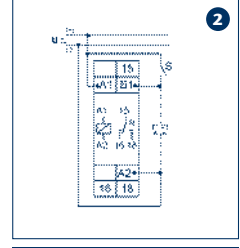
| | |
|-----------------------|--|
| Ambient temperature | -25 to +55°C (acc. to IEC 68-1) -25 to +40°C (UL 508) |
| Storage temperature | -25 to +70°C |
| Transport temperature | -25 to +70°C |
| Relative humidity | 15% to 85% (acc. to IEC 721-3-3 Class 3K3) |
| Pollution degree | 3 (acc. to IEC 664-1) |
| Vibration resistance | 10 to 55 Hz 0.35 mm (acc. to IEC 68-2-6) |
| Shock resistance | 15 g 11 ms (acc. to IEC 68-2-27) |

| | MFR 1 | MFR 4 | MFR 51 |
|--|--|---|---|
| Type | MFR 1 | MFR 4 | MFR 5 |
| Cat. no./Qty. | 15100.2/1 | 15677.2/1 | 15678.2/1 |
| Dimensions | 1 | 2 | 2 |
| Wiring diagram | 1 | 2, 3 | 2, 3 |
| Dimensions (L x W x H) TS 35 x 7.5 | 64 x 22.5 x 77.5 mm | 87 x 17.5 x 67.5 mm | 87 x 17.5 x 67.5 mm |
| Weight (individual packaging: module and packaging) | 65 g | 65 g | 65 g |
| Short description | Timing relay | Timing relay | Timing relay |
| | Multi-functional | Multi-functional | Multi-functional |
| | 8 functions | 4 functions | 7 functions |
| | 8 time delay ranges | 7 time delay ranges | 7 time delay ranges |
| | 1 CO contact | 1 CO contact | 1 CO contact |
| | Width 22.5 mm | Width 17.5 mm | Width 17.5 mm |
| | Industrial construction | Installation design | Installation design |
| Functions | E, R, Ws, Wa, Es, Wu, Bp, Wt* | E, R, Wu, Bp* | E, R, Ws, Wa, Es, Wu, Bp* |
| Time ranges / setting ranges | 50 ms to 10 d | 50 ms to 100 h | 50 ms to 100 h |
| Displays | Green LED U/t ON* Green LED U/t flashes* Yellow LED R ON/OFF* | Green LED U/t ON* Green LED U/t flashes* Yellow LED R ON/OFF* | Green LED U/t ON* Green LED U/t flashes* Yellow LED R ON/OFF* |
| Input circuit | 24 V DC, terminals A1(+)-A2(-), switch engaged 24 V DC, terminals A1-A2, switch engaged 110 to 240 V AC, terminals A1-A2, switch dis-engaged | 24 to 240 V AC/DC, terminals A1(+)-A2(-) | 12 to 240 V AC/DC terminals A1(+)-A2(-) |
| Supply voltage | 24 V DC ± 10 % 24 V AC -15% to +10% 110 to 240 VAC -15% to +10% | 24 V -15 % to 240 V +10% | 12 V -10% to 240 V +10% |
| Tolerance | | | |
| Rated frequency | 48 to 63 Hz | 48 to 63 Hz | 48 to 63 Hz |
| Rated consumption | 24 V AC/DC 1.5 VA (1 W) 110 V AC 2 VA (1 W) 240 V AC 8 VA (1.3 W) | 4 VA (1.5 W) | 4 VA (1.5 W) |
| ON duration | 100 % | 100 % | 100 % |
| Recovery time | 250 ms | 100 ms | 100 ms |
| Residual ripple with DC | 10 % | 10 % | 10 % |
| Release voltage | > 30% of the min. Supply voltage | > 30% of the min. Supply voltage | > 30% of the min. Supply voltage |
| Overvoltage category | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) |
| Rated impulse voltage | 4 kV | 4 kV | 4 kV |
| Output circuit | 1 potential-free CO contact | 1 potential-free CO contact | 1 potential-free CO contact |
| Rated voltage | 250 V AC | 250 V AC | 250 V AC |
| Switching capacity of module mounted side-by-side (gap < 5 mm) | 1250 VA (5 A/250 V AC) | 2000 VA (8 A/250 V AC) | 2000 VA (8 A/250 V AC) |
| Switching capacity of module not mounted side-by-side (gap < 5 mm) | 2000 VA (8 A/250 V AC) | 2000 VA (8 A/250 V AC) | 2000 VA (8 A/250 V AC) |
| Fusing | 8 A fast | 8 A fast | 8 A fast |
| Mechanical life span | 20 x 10 ⁶ switching cycles | 20 x 10 ⁶ switching cycles | 20 x 10 ⁶ switching cycles |
| Electrical service life | 2 x 10 ⁵ switching cycles at 1000 VA* | 2 x 10 ⁵ switching cycles at 1000 VA* | 2 x 10 ⁵ switching cycles at 1000 VA* |
| Switching frequency | Max. 60/min at 100 VA* Max. 6/min at 1000 VA* (acc. to IEC 947-5-1) | Max. 60/min at 100 VA* Max. 6/min at 1000 VA* (acc. to IEC 947-5-1) | Max. 60/min at 100 VA* Max. 6/min at 1000 VA* (acc. to IEC 947-5-1) |
| Rated insulation voltage | 250 VAC (acc. to IEC 664-1) | 250 VAC (acc. to IEC 664-1) | 250 VAC (acc. to IEC 664-1) |
| Overvoltage category | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) |
| Rated impulse voltage | 4 kV | 4 kV | 4 kV |
| Process times (without relay switching times) | | | |
| ON delay | AC 25-55 ms, DC 35-45 ms | | |
| OFF delay | AC/DC 10-20 ms | | |
| Stored energy time when voltage fails | Max. 10 ms | | |
| Control contact | | | |
| Input | Non-floating, terminals A1-B1 | Non-floating, terminals A1-B1 | Non-floating, terminals A1-B1 |
| Load capacity | Parallel load, min. 1 VA (0.5 W) Terminals A2-B1 | Yes | Yes |
| Response threshold | | Automatically adjusted to supply voltage | Automatically adjusted to supply voltage |
| Maximum cable length | 10 m | 10 m | 10 m |
| Minimum pulse duration | AC/DC 50 ms | DC 50 ms/AC 100 ms | DC 50 ms/AC 100 ms |
| Accuracy | | | |
| Basic accuracy | ± 1% (from scale reading) | ± 1% (from scale reading) | ± 1% (from scale reading) |
| Setting tolerance | ≤ 5% (from scale reading) | ≤ 5% (from scale reading) | ≤ 5% (from scale reading) |
| Repeat accuracy | < 0.5% or ± 5 ms | < 0.5% or ± 5 ms | < 0.5% or ± 5 ms |
| Voltage influence | - | - | - |
| Temperature influence | ≤ 0.01% /°C | ≤ 0.01% /°C | ≤ 0.01% /°C |

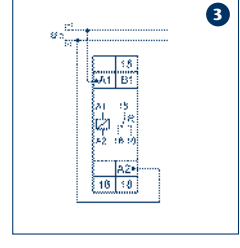
Connection diagram



With control contact



Without control contact



Legend:
E ON-delay
R OFF-delay*
Ws Impulse-ON*
Wa Impulse-OFF*
Es ON-delay*
Wu Impulse-ON Voltage controlled
Bp Flasher begin with delay
Wt Pulse monitoring
 *with control contact
Green LED U/t ON: Supply voltage applied
Green LED U/t flashing: Indicates timing period
Yellow LED R ON/OFF: Position of output relay
Output circuit
 VA resistive load

* see legend

Clock-pulse generator dual-timing relays MFR

MFR 6

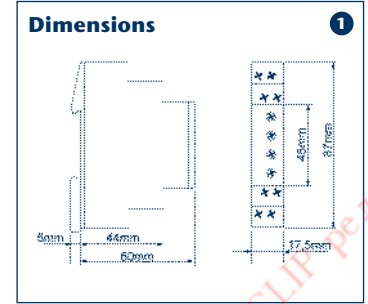
Specifications

Mechanical design

- Mount on TS 35
- Housing made of self-extinguishing plastic, IP40 protection
- Any mounting position possible
- Screw connections protected against accidental touch, according to VBG 4, IP20 protection

Screw connection

- 1 x 0.5 to 2.5 mm² with/without wire-end ferrules
- 1 x 4 mm² without wire-end ferrules
- 2 x 0.5 to 1.5 mm² with/without wire-end ferrules
- 2 x 2.5 mm² flexible without wire-end ferrules
- Tightening torque max. 1 Nm



Environmental conditions

| | |
|-----------------------|--|
| Ambient temperature | -25 to +55°C (acc. to IEC 68-1) -25 to +40°C (UL 508) |
| Storage temperature | -25 to +70°C |
| Transport temperature | -25 to +70°C |
| Relative humidity | 15% to 85% (acc. to IEC 721-3-3 Class 3K3) |
| Pollution degree | 3 (acc. to IEC 664-1) |
| Vibration resistance | 10 to 55 Hz 0.35 mm (acc. to IEC 68-2-6) |
| Shock resistance | 15 g 11 ms (acc. to IEC 68-2-27) |

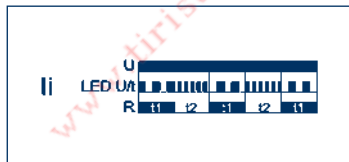
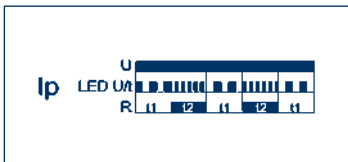
Description of function


Pulsed begin with delay (Ip)

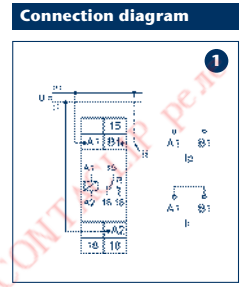
The set time t1 begins to run with the application of the supply voltage U. (The green LED U/t flashes slowly.) After the time t1 expires, the output relay R activates (yellow LED is lit), and the time t2 begins to run (green LED U/t flashes quickly). After the time t2 has expired, the output relay deactivates (yellow LED not lit). The output relay is controlled in accordance with both set times- until the supply voltage is interrupted.

Pulsed begin with pulse (Ii)

The output relay R is activated (yellow LED lit) when the supply voltage U is applied. The set time t1 then begins to run (green LED U/t flashes slowly). After the time t1 has expired, the output relay is deactivated (yellow LED not lit), and the set time t2 begins to run (green LED flashes quickly). After the time t2 has expired, the output relay re-activates (yellow LED is lit). The output relay is controlled in accordance with both set times- until the supply voltage is interrupted.



| | MFR 6 | | |
|--|---|--|--|
| |  | | |
| Type | MFR 6 | | |
| Cat. no./Qty. | 15679.2/1 | | |
| Dimensions | 1 | | |
| Wiring diagram | 1 | | |
| Dimensions (L x W x H) TS 35 x 7.5 | 87 x 17.5 x 67.5 mm | | |
| Weight (individual packaging: module and packaging) | 72 g | | |
| Short description | Clock pulse generator | | |
| | 7 time delay ranges | | |
| | Wide-range input | | |
| | 1 CO contact | | |
| | Width 17.5 mm | | |
| | Installation design | | |
| Functions | | | |
| | Ip Pulsed begin with delay | | |
| | Ii Pulsed begin with pulse (with jumper A1-B1) | | |
| Time ranges / setting ranges | | | |
| | 50 ms to 100 h | | |
| Display | | | |
| | Green LED U/t ON* | | |
| | Green LED V/t flashes slowly* | | |
| | Green LED V/t flashes quickly* | | |
| | Yellow LED R ON/OFF* | | |
| Input circuit | | | |
| Supply voltage | 12 to 240 V AC/DC, terminals A1(+)-A2(-) | | |
| Tolerance | 12 V -10% to 240 V +10% | | |
| Rated frequency | 48 to 63 Hz | | |
| Rated consumption | 4 VA (1.5 W) | | |
| ON duration | 100 % | | |
| Recovery time | 100 ms | | |
| Residual ripple with DC | 10 % | | |
| Release voltage | > 30 % of the min. supply voltage | | |
| Overvoltage category | III (acc. to IEC 664-1) | | |
| Rated impulse voltage | 4 kV | | |
| Output circuit | | | |
| Rated voltage | 1 potential-free CO contact 250 V AC | | |
| Switching capacity of module mounted side-by-side (gap < 5 mm) | 2000 VA (8 A/250 V AC) | | |
| Switching capacity of module not mounted side-by-side (gap < 5 mm) | 2000 VA (8 A/250 V AC) | | |
| Fusing | 8 A fast | | |
| Mechanical life span | 20 x 10 ⁶ switching cycles | | |
| Electrical service life | 2 x 10 ⁵ switching cycles at 1000 VA* | | |
| Switching frequency | Max. 60/min at 100 VA* Max. 6/min at 1000 VA* (acc. to IEC 947-5-1) | | |
| Overvoltage category | III (acc. to IEC 664-1) | | |
| Rated impulse voltage | 4 kV | | |
| Control contact | | | |
| Input | Non-floating, terminals A1-B1 | | |
| Load capacity | Yes | | |
| Response threshold | Automatically adjusted to supply voltage | | |
| Maximum cable length | 10 m | | |
| Accuracy | | | |
| Basic accuracy | ± 1% (from scale reading) | | |
| Setting tolerance | < 5 % (from scale reading) | | |
| Repeat accuracy | < 0.5% or ± 5 ms | | |
| Voltage influence | - | | |
| Temperature influence | ≤ 0.01% /°C | | |



Legend:
Green LED U/t ON: Supply voltage applied
Green LED U/t flashes slowly: Indicates timing period t1
Green LED U/t flashes quickly: Indicates timing period t2
Yellow LED R ON/OFF: Position of output relay
Output circuit
 VA resistive load

* see legend

Staircase lighting time-limit switch TSR

TSR 1 | TSR 2

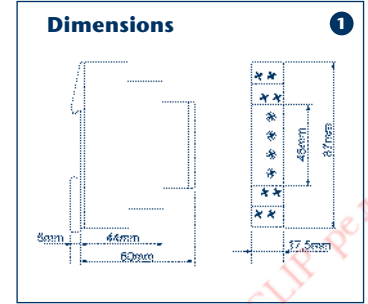
Specifications

Mechanical design

- Mount on TS 35
- Housing made of self-extinguishing plastic, IP40 protection
- Any mounting position possible
- Screw connections protected against accidental touch, according to VBG 4, IP20 protection

Screw connection

- 1 x 0.5 to 2.5 mm² with/without wire-end ferrules
- 1 x 4 mm² without wire-end ferrules
- 2 x 0.5 to 1.5 mm² with/without wire-end ferrules
- 2 x 2.5 mm² flexible without wire-end ferrules
- Tightening torque max. 1 Nm



Environmental conditions

| | |
|-----------------------|--|
| Ambient temperature | -25 to +55°C (acc. to IEC 68-1) -25 to +40°C (UL 508) |
| Storage temperature | -25 to +70°C |
| Transport temperature | -25 to +70°C |
| Relative humidity | 15% to 85% (acc. to IEC 721-3-3 Class 3K3) |
| Pollution degree | 3 (acc. to IEC 664-1) |
| Vibration resistance | 10 to 55 Hz 0.35 mm (acc. to IEC 68-2-6) |
| Shock resistance | 15 g 11 ms (acc. to IEC 68-2-27) |

Description of function

Electronic staircase lighting time-limit switches with an advance-OFF warning function. The control input allows for a connection of push-buttons with up to a total of 100 mA glow-lamp current. It can be used in three- or four-cable circuits. The device can be re-triggered by pressing the connected push-buttons or turned off by pressing down for a longer time on the push-button (energy-saving function). Rapid multiple pressing (“pumping”) of the button extends the interval by the set time t. Depending on the design version, the following operating modes can be selected with the front control unit:

The automatic timing function (T, TW)

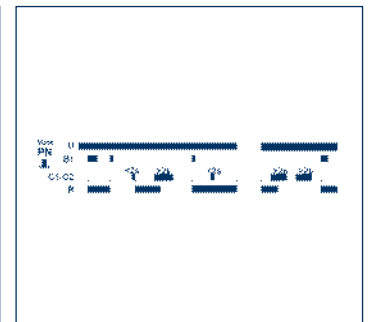
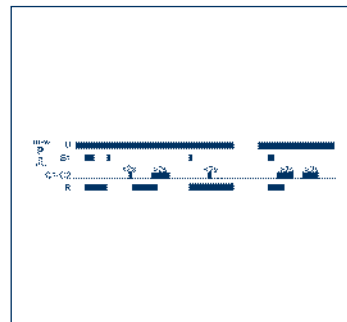
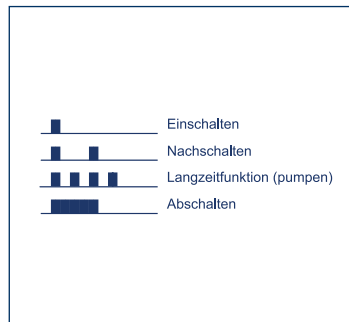
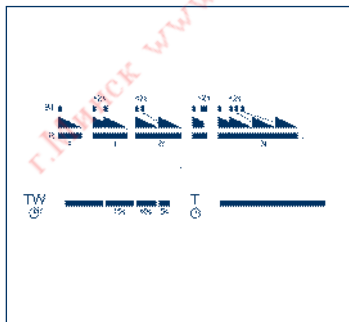
After pressing the button B1, the output relay R closes (terminals L18) and the set time t begins to run. If the button is pressed again before the time t expires, then the time begins anew (the re-start function complies with EN 60669-2-3). Quick multiple pressing of the button (pumping) adds two, three, or more intervals to extend the time up to 60 minutes. Prolonged pressing of the button (more than two seconds) then aborts the running interval, and the relay turns off (energy saving function). The TW mode the device provides a switch-off warning (complies with DIN 180-15-2) by generating short pulses (flashes) at 30, 15, and 5 seconds before switch-off.



Operational possibilities with B1 in automatic timing

The additional control inputs C1-C2 is used in the T and TW modes to control the staircase lighting timer using a voltage from 8 - 230 V AC/DC. This input can be used to start and restart the time cycle. It can not be used for switch-off (energy saving) or for programming longer intervals (pumping).

Impulse switch mode (P), (PN)

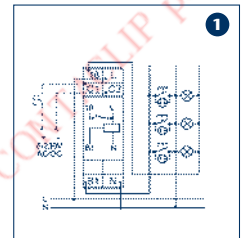
In impulse switch mode, every button press (on B1) switches (toggles) the output relay T. In the P function, the output relay R remains in the off-position when the supply voltage is applied. In the PN function, the output relay R switches to on-position immediately after the supply voltage is applied, if the relay was on before the last power stoppage. The output relay R switches to on-position (central ON), if a short (< 2 sec.) voltage impulse is applied to the additional control input C1-C2. A longer voltage impulse (> 2 sec.) turns off the output relay R (central OFF).



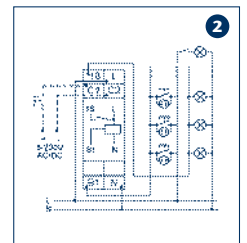
| | TSR 1 | TSR 2 | |
|--|---|--|--|
| |  |  | |
| Type | TSR 1 | TSR 2 | |
| Cat. no./Qty. | 15680.2/1 | 15681.2/1 | |
| Dimensions | 1 | 1 | |
| Wiring diagrams | 1, 2 | 1, 2 | |
| Dimensions (L x W x H) TS 35 x 7.5 | 87 x 17.5 x 67.5 mm | 87 x 17.5 x 67.5 mm | |
| Weight (individual packaging: module and packaging) | 106 g | 106 g | |
| Short description | Staircase light timer, electronic | Staircase light timer, electronic | |
| | Advance turn-off warning | Advance turn-off warning | |
| | Retrigger function, extended time function | Retrigger function, extended time function | |
| | Energy saving | Energy saving | |
| | Selectable impulse relay mode | Selectable impulse relay mode | |
| | Low switching noise | Low switching noise | |
| | High switching capacity | High switching capacity, | |
| | 80 A inrush current peak | 80 A inrush current peak | |
| | Automatic 3 or 4 cable recognition | Automatic 3 or 4 cable recognition | |
| | Glow lamp load up to 100 mA | Glow lamp load up to 100 mA | |
| | Width 17.5 mm | Width 17.5 mm | |
| | Installation design | Installation design | |
| Functions | Tw, P, 1, 0 | TW, T, 1, 0, P, PN | |
| Time ranges / setting ranges | Time delay | Time delay | |
| | 0.5 to 12 min (in function T, TW) | 0.5 to 12 min (in function T, TW) | |
| Display | Green LED U/t ON* | Green LED U/t ON* | |
| | Yellow LED R ON/OFF* | Yellow LED R ON/OFF* | |
| Input circuit | Terminals L - N | Terminals L - N | |
| Supply voltage | 230 V AC | 230 V AC | |
| Rated voltage | -15 % to +10 % | -15 % to +10 % | |
| Tolerance | 48 to 63 Hz | 48 to 63 Hz | |
| Rated frequency | 2 VA (1.0 W) | 2 VA (1.0 W) | |
| Rated consumption | 100 % | 100 % | |
| ON duration | 500 ms | 500 ms | |
| Recovery time | - | - | |
| Stored energy time | - | - | |
| Residual ripple with DC | > 30 % | > 30 % | |
| Release voltage | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) | |
| Overvoltage category | 4 kV | 4 kV | |
| Rated impulse voltage | 1 NO contact, terminals L - 18 | 1 NO contact, terminals L - 18 | |
| Output circuit | 250 V AC | 250 V AC | |
| Rated voltage | 10 A continuous current | 10 A continuous current | |
| Switching capacity of module mounted side-by-side (gap < 5 mm) | 16 A continuous current | 16 A continuous current | |
| Switching capacity of module not mounted side-by-side (gap < 5 mm) | 80 A | 80 A | |
| Inrush current peak (20 ms) | 30 x 10 ⁶ switching cycles | 30 x 10 ⁶ switching cycles | |
| Mechanical life span | 2 x 10 ⁵ switch. cycles at 16 A/250 V | 2 x 10 ⁵ switch. cycles at 16 A/250 V | |
| Electrical service life | 80,000 switch. cycles at 1000 W/250 V | 80,000 switch. cycles at 1000 W/250 V | |
| Resistive load | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) | |
| Glow lamp load | 4 kV | 4 kV | |
| Overvoltage category | Control input B1 | Control input B1 | |
| Rated impulse voltage | Non-floating, push-button B1-N | Non-floating, push-button B1-N | |
| Control contact | (3-cable circuit), push-button B1-L | (3-cable circuit), push-button B1-L | |
| Connection | (4-cable circuit) | (4-cable circuit) | |
| | Max. 100 mA parallel to the push-buttons | Max. 100 mA parallel to the push-buttons | |
| Glow lamp load | Yes, electronic | Yes, electronic | |
| Overload protection | Control voltage on terminals C1(+)-C2 | Control voltage on terminals C1(+)-C2 | |
| Additional control input | 8 to 230 V AC/DC | 8 to 230 V AC/DC | |
| Connection | Yes, basic insulation | Yes, basic insulation | |
| | III (acc. to IEC 60664-1) | III (acc. to IEC 60664-1) | |
| Control voltage | 4 kV | 4 kV | |
| Electrical isolation | - | - | |
| Overvoltage category | - | - | |
| Rated impulse voltage | - | - | |
| Accuracy | ± 5 % (from scale reading) | ± 5 % (from scale reading) | |
| Basic accuracy | < 15 % (from scale reading) | < 15 % (from scale reading) | |
| Setting tolerance | < 2 % | < 2 % | |
| Repeat accuracy | - | - | |
| Voltage influence | ≤ 1 % | ≤ 1 % | |
| Temperature influence | | | |

Connection diagram

3-cable circuit



4-cable circuit with attic illumination



Legend:

- TW:** Automatic timing function with advance turn-off warning
- T:** Automatic timing function without advance turn-off warning
- 1:** Continuous lighting
- 0:** Switched off
- P:** Impulse relay without timing function
- PN:** Impulse relay neutral-voltage safe
- Green LED U/t ON:** Supply voltage applied
- Yellow LED R ON/OFF:** Position of output relay

* see legend

Undervoltage monitoring relays USR

USR 1 | USR 2

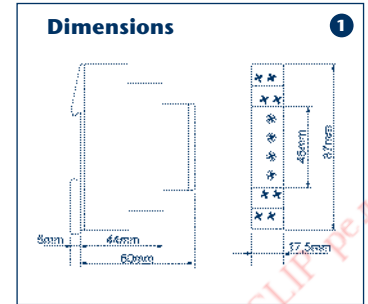
Specifications

Mechanical design

- Mount on TS 35
- Housing made of self-extinguishing plastic, IP40 protection
- Any mounting position possible
- Screw connections protected against accidental touch, according to VBG 4, IP20 protection

Screw connection

- 1 x 0.5 to 2.5 mm² with/without wire-end ferrules
- 1 x 4 mm² without wire-end ferrules
- 2 x 0.5 to 1.5 mm² with/without wire-end ferrules
- 2 x 2.5 mm² flexible without wire-end ferrules
- Tightening torque max. 1 Nm



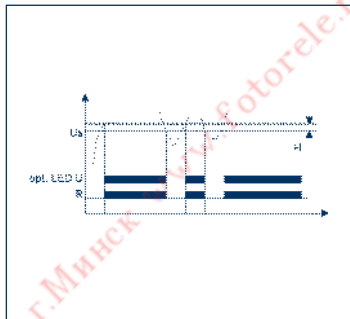
| Environmental conditions | |
|--------------------------|--|
| Ambient temperature | -25 to +55°C (acc. to IEC 68-1) -25 to +40°C (UL 508) |
| Storage temperature | -25 to +70°C |
| Transport temperature | -25 to +70°C |
| Relative humidity | 15% to 85% (acc. to IEC 721-3-3 Class 3K3) |
| Pollution degree | 3 (acc. to IEC 664-1) |
| Vibration resistance | 10 to 55 Hz 0.35 mm (acc. to IEC 68-2-6) |
| Shock resistance | 15 g 11 ms (acc. to IEC 68-2-27) |



Description of function

Undervoltage monitoring for three-phase AC mains with a fixed (UFR 1) or variable (UFR 2) switching threshold, and a fixed hysteresis. All measuring inputs (L1, L2, and L3) must each be connected to a phase voltage. If three-phase measurements are not desired, then multiple measurement inputs should be connected to one phase, so that all inputs have the appropriate voltage applied. If the reverse voltage coming from the load exceeds the threshold U_s , then a phase failure can not be detected.

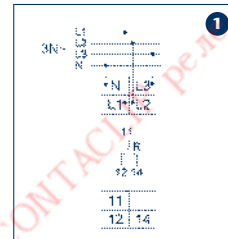
Undervoltage monitoring without the optional time function

The output relay activates (yellow LED lit) when the measured voltage of all connected phases exceeds the threshold U_s by more than the hysteresis. When the voltage of one of the connected phases falls below the fixed threshold value, the output relay is deactivated (yellow LED not lit).

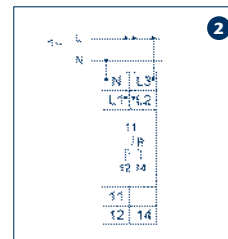


| | USR 1 | USR 2 | |
|--|---|--|--|
| |  |  | |
| Type | USR 1 | USR 2 | |
| Cat. no./Qty. | 15682.2/1 | 15683.2/1 | |
| Dimensions | 1 | 1 | |
| Wiring diagrams | 1, 2 | 1, 2 | |
| Dimensions (L x W x H) TS 35 x 7.5 | 87 x 17.5 x 67.5 mm | 87 x 17.5 x 67.5 mm | |
| Weight (individual packaging: module and packaging) | 72 g | 72 g | |
| Short description | Undervoltage Monitoring relay | Undervoltage Monitoring relay | |
| | Voltage monitoring 3-phase | Voltage monitoring 3-phase | |
| | Undervoltage monitoring of supply voltage = measured voltage | Undervoltage monitoring of supply voltage = measured voltage | |
| | Switching threshold fixed for systems acc. to VDE0108 | Switching threshold, variable | |
| | 1 CO contact | 1 CO contact | |
| | Width 17.5 mm | Width 17.5 mm | |
| | Installation design | Installation design | |
| Time ranges / setting ranges | Output delay | Output delay | |
| | Quick, approx. 200 ms | Quick, approx. 200 ms | |
| Display | Yellow LED R ON/OFF* | Yellow LED R ON/OFF* Green LED L1 ON/OFF* Green LED L2 ON/OFF* Green LED L3 ON/OFF* | |
| Input circuit | | | |
| Supply voltage | = measured voltage | = measured voltage | |
| Terminals | N-L1-L2-L3 | N-L1-L2-L3 | |
| Rated voltage | Un: 3N-400/230 V | Un: 3N-400/230 V | |
| Tolerance | -30 % to +10 % from Un | -30 % to +10 % from Un | |
| Rated frequency | 48 to 63 Hz | 48 to 63 Hz | |
| Rated consumption | 5 VA (0.6 W) | 8 VA (0.8 W) | |
| ON duration | 100 % | 100 % | |
| Recovery time | 500 ms | 500 ms | |
| Stored energy time | - | - | |
| Release voltage | Defined by measurement function | Defined by measurement function | |
| Overvoltage category | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) | |
| Rated impulse voltage | 4 kV | 4 kV | |
| Output circuit | 1 potential-free CO contact | 1 potential-free CO contact | |
| Switching capacity | 250 V AC | 250 V AC | |
| Switching capacity of module mounted side-by-side (gap < 5 mm) | 1250 VA (5 A/250 V AC) | 1250 VA (5 A/250 V AC) | |
| Switching capacity of module not mounted side-by-side (gap < 5 mm) | 1250 VA (5 A/250V AC) | 1250 VA (5 A/250 V AC) | |
| Fusing | 5 A fast | 5 A fast | |
| Mechanical life span | 20 x 10 ⁵ switching cycles | 20 x 10 ⁵ switching cycles | |
| Electrical service life | 2 x 10 ⁵ switching cycles at 1000 VA* | 2 x 10 ⁵ switching cycles at 1000 VA* | |
| Switching frequency | Max. 60/min at 100 VA* Max. 6/min at 1000 VA* (acc. to IEC 947-5-1) | Max. 60/min at 100 VA* Max. 6/min at 1000 VA* (acc. to IEC 947-5-1) | |
| Overvoltage category | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) | |
| Rated impulse voltage | 4 kV | 4 kV | |
| Measurement circuit | | | |
| Measured quantity | AC sinusoidal, 48 to 68 Hz | AC sinusoidal, 48 to 68 Hz | |
| Measurement input | = supply voltage | = supply voltage | |
| Terminals | N-L1-L2-L3 | N-L1-L2-L3 | |
| Overload capability | Defined by the tolerance of the supply voltage | Defined by the tolerance of the supply voltage | |
| Input resistance | - | - | |
| Switching threshold Us | Fast 195.5 V (L-N) for installations to VDE 0108 | 160 to 240 V (L-N) | |
| Hysteresis H | Approx. 5 % | Approx. 5 % | |
| Overvoltage category | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) | |
| Rated impulse voltage | 4 kV | 4 kV | |
| Accuracy | | | |
| Basic accuracy | ± 5 % of rated voltage | ± 5 % of rated voltage | |
| Setting tolerance | - | - | |
| Repeat accuracy | ≤ 2 % | ≤ 2 % | |
| Voltage influence | - | - | |
| Temperature influence | ≤ 1 % | ≤ 1 % | |

Connection diagram



Connection diagram



Legend:

Yellow LED R ON/OFF:
Position of output relay
Green LED L1 ON/OFF:
Indication of voltage L1-N
Green LED L2 ON/OFF:
Indication of voltage L2-N
Green LED L3 ON/OFF:
Indication of voltage L3-N

Output circuit
VA resistive load

Star-delta switching relays SDR

SDSR 1 | SDSR 2

Specifications

Mechanical design

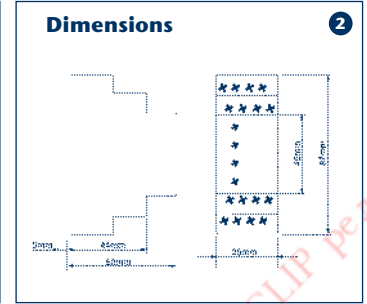
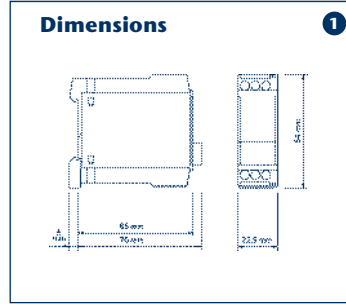
- Mount on TS 35
- Housing made of self-extinguishing plastic, IP40 protection
- Any mounting position possible
- Screw connections protected against accidental touch, according to VBG 4, IP20 protection

Screw connection

- 1 x 0.5 to 2.5 mm² with/without wire-end ferrules
- 1 x 4 mm² without wire-end ferrules
- 2 x 0.5 to 1.5 mm² with/without wire-end ferrules
- 2 x 2.5 mm² flexible without wire-end ferrules
- Tightening torque max. 1 Nm

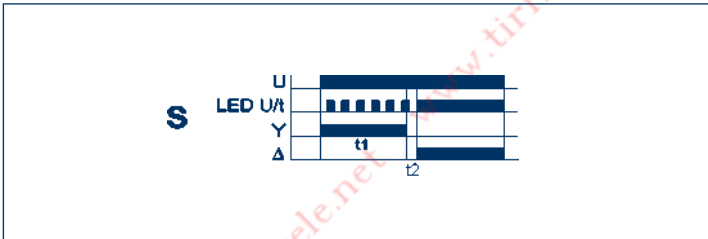
Description of function



When supply voltage U is applied, the output relay for the star protection activates (yellow LED is lit), and the set star time (t1) begins to run (green LED U/t flashes). After the star time expires (green LED U/t is lit), the output relay for the star protection is deactivated (yellow LED is not lit), and the set transit time (t2) begins to run. After the transit time expires, the output relay for the delta protection activates. In order to re-start this function, the supply voltage must be interrupted and re-applied.



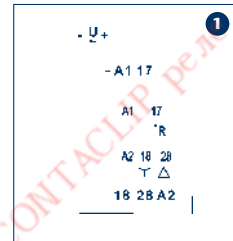
Environmental conditions

| | |
|-----------------------|--|
| Ambient temperature | -25 to +55°C (acc. to IEC 68-1) -25 to +40°C (UL 508) |
| Storage temperature | -25 to +70°C |
| Transport temperature | -25 to +70°C |
| Relative humidity | 15% to 85% (acc. to IEC 721-3-3 Class 3K3) |
| Pollution degree | 2, in installed condition 3 (acc. to IEC 664-1) |
| Vibration resistance | 10 to 55 Hz 0.35 mm (acc. to IEC 68-2-6) |
| Shock resistance | 15 g 11 ms (acc. to IEC 68-2-27) |

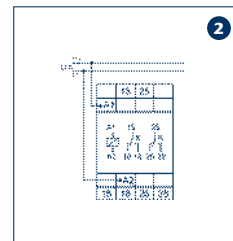


| | SDSR 1 | SDSR 2 | |
|--|--|---|--|
| |  |  | |
| Type | SDSR 1 | SDSR 2 | |
| Cat. no./Qty. | 15776.2/1 | 15777.2/1 | |
| Dimensions | 1 | 2 | |
| Connection diagram | 1 | 2 | |
| Dimensions (L x W x H) TS 35 x 7.5 | 64 x 22.5 x 77.5 mm | 87 x 35 x 67.5 mm | |
| Weight (individual packaging: module and packaging) | 65 g | 106 g | |
| Short description | Star-delta start-up | Star-delta start-up | |
| | 2 NO | 2 CO contact | |
| | Width 22.5 mm | Width-range input | |
| | Industrial design | Installation design | |
| Functions | | | |
| | 5 star-delta start-up | 5 star-delta start-up | |
| Time delay range | Time end range/setting range | Time end range/setting range | |
| Star time | 10 sec/500 ms to 10 sec 30 sec/1500 ms to 30 sec 1 min/3 sec to 1 min | 10 sec/500 ms to 10 sec 30 sec/1500 ms to 30 sec 1 min/3 sec to 1 min | |
| Transit time (fast) | | | |
| | 40 ms | 40 ms | |
| | 60 ms | 60 ms | |
| | 80 ms | 80 ms | |
| | 100 ms | 100 ms | |
| Display | | | |
| | Green LED ON* | Green LED ON* | |
| | Green LED flashes* | Green LED flashes* | |
| | Yellow LED R ON/OFF* | Yellow LED R ON/OFF* | |
| Supply circuit | | | |
| Supply voltage | 24 V DC, terminals A1(+)-A2(-), switch engaged 24 V DC, terminals A1-A2, Switch engaged 110 to 240 V AC, terminals A1-A2, switch dis-engaged | 12 to 240 V AC/DC terminals A1(+)-A2(-) | |
| Tolerance | 24 V DC $\pm 10\%$ 24 V AC -15% to +10% 110 to 240 VAC -15% to +10% | 12 V -10% to 240 V +10% | |
| Rated frequency | 48 to 63 Hz | 48 to 63 Hz | |
| Rated consumption | 24 V AC/DC 1.5 VA (1 W) 110 V AC/DC 2 VA (1 W) 240 V AC 8 VA (1.3 W) | 4 VA (1.5 W) | |
| ON duration | 100% | 100% | |
| Recovery time | 100 ms | 100 ms | |
| Residual ripple with DC | 10% | 10% | |
| Release voltage | > 30 % of the min. supply voltage | > 30 % of the min. supply voltage | |
| Overvoltage category | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) | |
| Rated impulse voltage | 4 kV | 4 kV | |
| Output circuit | | | |
| Rated voltage | 250 V AC | 250 V AC | |
| Switching capacity of module mounted side-by-side (gap < 5 mm) | 1250 VA (5A/250V AC) | 2000 VA (8A/250V AC) | |
| Switching capacity of module not mounted side-by-side (gap < 5 mm) | 2000 VA (8A/250V AC) | 2000 VA (8A/250V AC) | |
| Fusing | 8A fast | 8A fast | |
| Mechanical life span | 20 x 10 ⁶ switching cycles | 20 x 10 ⁶ switching cycles | |
| Electrical service life | 2 x 10 ⁵ switching cycles at 1000 VA resistive load | 2 x 10 ⁵ switching cycles at 1000 VA resistive load | |
| Switching frequency | Max. 60/min at 100 VA resistive load Max. 6/min at 1000 VA resistive load (acc. to IEC 947-5-1) | Max. 60/min at 100 VA resistive load Max. 6/min at 1000 VA resistive load (acc. to IEC 947-5-1) | |
| Rated insulation voltage | 250 VAC (acc. to IEC 664-1) | 250 VAC (acc. to IEC 664-1) | |
| Overvoltage category | III (acc. to IEC 664-1) | III (acc. to IEC 664-1) | |
| Rated impulse voltage | 4 kV | 4 kV | |
| Accuracy | | | |
| Basic accuracy | $\pm 1\%$ (from scale reading) | $\pm 1\%$ (from scale reading) | |
| Setting tolerance | $\leq 25\%$ (from scale reading) | $\leq 25\%$ (from scale reading) | |
| Repeat accuracy | < 0.5% or ± 5 ms | < 0.5% or ± 5 ms | |
| Voltage influence | - | - | |
| Temperature influence | $\leq 20.01\%$ /°C | $\leq 20.01\%$ /°C | |

Connection diagram



Connection diagram



Legend:

Green LED ON*:
Supply voltage activated
Output relay for delta protection is activated

Green LED flashes*:
Indicates expiration of star time

Yellow LED R ON/OFF*:
Position of output relay for star protection

Voltage-monitoring relay VMR

VMR 1 | VMR 2

The new voltage-monitoring relays conveniently monitor three-phase systems with and without a neutral wire. By precisely capturing characteristic values, they ensure the accessibility and reliability of a facility or machine. And in doing so, they deliver long-term added value. When operating facilities such as pumps and machines, it is critical to monitor the phase sequence, phase loss and asymmetry. Monitoring allows safe operation and prevents damage in a simple and efficient way. The power for the devices is supplied from the monitored measurement circuit. Thus the relays can easily and punctually record any irregularities in the three-phase supply systems, such as single-phase operations resulting from mains malfunctions which can lead to overheated motors. They notify of the need for maintenance or repair steps before further costs are incurred.

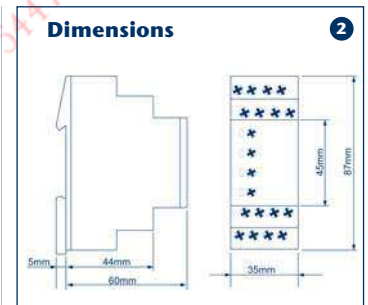
Application areas:

- Monitoring the connection for mobile equipment (construction equipment, agricultural devices, refrigerated vehicles)
- For the protection of people and facilities – monitoring for reversal of rotation direction (for hoisting equipment, conveyor systems, elevators, escalators, etc.)
- Monitoring of sensitive systems
- Protection from the effects of passing temporary loads (loss of phase)
- Switching from normal to spare systems

Screw connection

- 1 x 0.5 to 2.5 mm² with/without wire-end ferrules
- 1 x 4 mm² without wire-end ferrules
- 2 x 0.5 to 1.5 mm² with/without wire-end ferrules
- 2 x 2.5 mm² flexible without wire-end ferrules
- Tightening torque max. 1 Nm

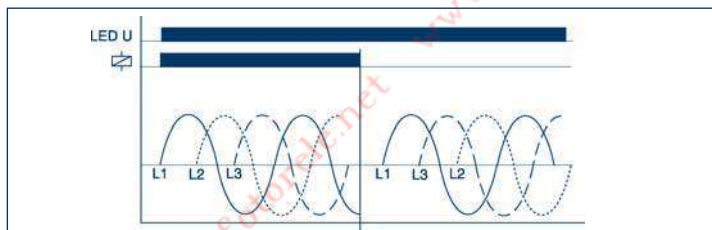
Dimensions



Environmental conditions

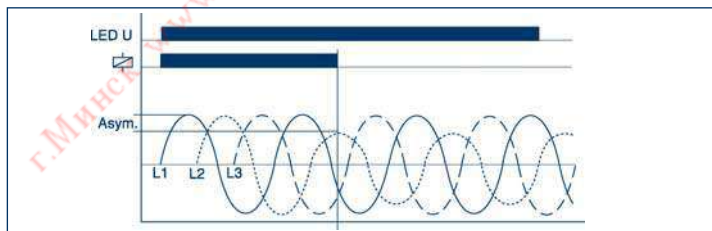
| | |
|-----------------------|--|
| Ambient temperature | -25 to +55°C (acc. to IEC 68-1) -25 to +40°C (UL 508) |
| Storage temperature | -25 to +70°C |
| Transport temperature | -25 to +70°C |
| Relative humidity | 15 % to 85 % (acc. to IEC 721-3-3 Class 3K3) |
| Pollution degree | 3 (acc. to IEC 664-1) |
| Vibration resistance | 10 to 55 Hz 0.35 mm (acc. to IEC 68-2-6) |
| Shock resistance | 15 g 11 ms (acc. to IEC 68-2-27) |

Description of function



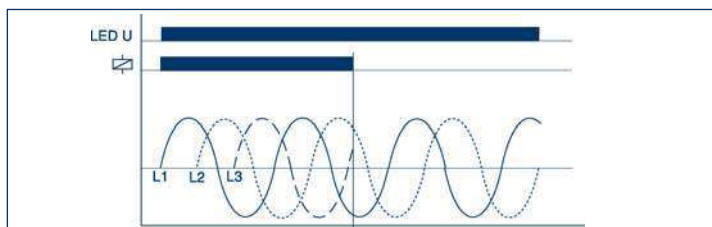
Monitoring of phase sequence

If all phase are connected correctly and the voltage asymmetry is smaller than the defined set value, then the output relay R activates (yellow LED illuminated). If the rotational direction of the phase sequence changes, then the output relay R deactivates (yellow LED not illuminated).



Monitoring asymmetry

The output relay R is deactivated (the yellow LED is not illuminated) when the asymmetry exceeds the set value on the ASYM controller. The shut-off also takes place when the asymmetry is caused by inverse voltage from motors running on two phases.

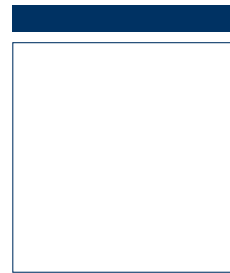


Monitoring for loss of phase

In the event of a phase loss, the output relay R deactivates (yellow LED is not illuminated).

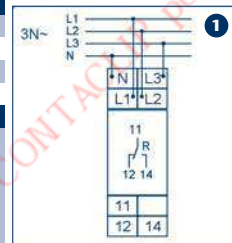
Voltage-monitoring relay VMR

- Mount on TS 35
- Housing made of self-extinguishing plastic, IP40 protection
- Any mounting position possible
- Screw connection terminals protected against accidental touch, acc. to VBG 4 IP 20 protection

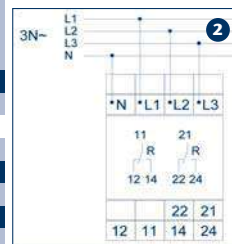


| | | | |
|--|--|--|--|
| Type | VMR 1 | VMR 2 | |
| Cat. no./Qty. | 15956.2/1 | 15957.2/1 | |
| Dimensions | 1 | 2 | |
| Connection diagram | 1 | 2 | |
| Dimensions (L x W x H) TS 35 x 7,5 | 87 x 17.5 x 67.5 mm | 87 x 35 x 67.5 mm | |
| Weight (individual packaging:module and packaging) | 72 g | 110 g | |
| Short description | Overvoltage monitoring in three-phase systems, monitoring for phase sequence and loss of phase Monitoring for asymmetrical connection of the neutral wire is optional; supply voltage = measuring-circuit voltage 1 CO contacts Width: 17.5 mm Installation design | Overvoltage monitoring in three-phase systems, monitoring for phase sequence and loss of phase Monitoring for asymmetrical connection of the neutral wire is optional; supply voltage = measuring-circuit voltage 2 CO contacts Width: 35 mm Installation design | |
| Functions | Monitoring asymmetry Monitoring for loss of phase | Monitoring asymmetry Monitoring for loss of phase | |
| Time delay range | | | |
| Triggering delay (quick) | | | |
| Displays | | | |
| Green LED ON | Position of output relay | Position of output relay | |
| Yellow LED ON/OFF | 1 min/3 s to 1 min | 1 min/3 s to 1 min | |
| Supply circuit | | | |
| Supply voltage | (N)-L1-L2-L3 | (N)-L1-L2-L3 | |
| Terminals | 3(N)-400/230 V | 3(N)-400/230 V | |
| Rated voltage UN | -30 % to +30 % of UN | -30 % to +30 % of UN | |
| Tolerance | 8 VA (0.8 W) | 11 VA (1.2 W) | |
| Rated consumption | AC 48 to 63 Hz | AC 48 to 63 Hz | |
| Rated frequency | 100 % | 100 % | |
| Power-on duration | 500 ms | 500 ms | |
| Recovery time | - | - | |
| Stored energy time | >20 % of supply voltage | >20 % of supply voltage | |
| Release voltage | III (acc. to IEC 60664-1) | III (acc. to IEC 60664-1) | |
| Overvoltage category | 4 kV | 6 kV | |
| Rated impulse voltage | | | |
| Output circuit | | | |
| Rated voltage | 1250 VA (5 A/250 V AC) | 1250 VA (5 A/250 V AC) | |
| Switching capacity | 5 A fast | 5 A fast | |
| Fusing | 20 x 10 ⁵ switching cycles | 20 x 10 ⁵ switching cycles | |
| Mechanical life span | 2 x 10 ⁵ switching cycles at 1000 VA resistive load | 2 x 10 ⁵ switching cycles at 1000 VA resistive load | |
| Electrical life span | Max. 60/min at 100 VA resistive load | Max. 60/min at 100 VA resistive load | |
| Switching frequency | Max. 6/min at 1000 VA resistive load (acc. to IEC 947-5-1) III (acc. to IEC 60664-1) | Max. 6/min at 1000 VA resistive load (acc. to IEC 947-5-1) III (acc. to IEC 60664-1) | |
| Overvoltage category | 4 kV | 6 kV | |
| Rated impulse voltage | | | |
| Measurement circuit | | | |
| Measured value | (= supply voltage) | (= supply voltage) | |
| Measurement input | (N)-L1-L2-L3 | (N)-L1-L2-L3 | |
| Terminals | Def. by tolerance of supply voltage | Def. by tolerance of supply voltage | |
| Overload capability | - | - | |
| Input resistance | 5 % – 25 % | 5 % – 25 % | |
| Asymmetry | III (acc. to IEC 60664-1) | III (acc. to IEC 60664-1) | |
| Overvoltage category | 4 kV | 6 kV | |
| Rated impulse voltage | | | |
| Accuracy | | | |
| Basic accuracy | ≤5 % | ≤5 % | |
| Setting tolerance | ±2 % | ±2 % | |
| Repeat accuracy | - | - | |
| Voltage influence | ≤0.05 % / °C | ≤0.05 % / °C | |
| Temperature influence | | | |

Connection diagram



Connection diagram



Voltage-monitoring relay VMR

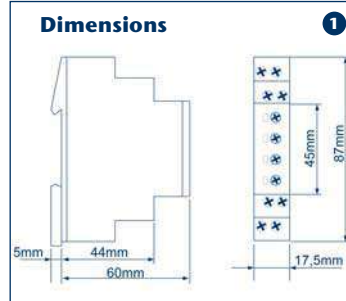
VMR 3

The new **VMR 3** voltage-monitoring relay features professional monitoring of phase loss and phase sequence in three-phase and single-phase systems, with adjustable switching thresholds and triggering delay. The monitoring of the phase sequence, and thus the rotational direction of the phase sequence, is a very important function. A drive which is rotating incorrectly can lead to severe machine or system damage. In addition, this

component can monitor machines for possible surges or dips in the mains voltage. A breakage in a neutral wire can also be quickly, safely, and reliably detected. So the **VMR 3** is the compact solution for operating non-stationary machines securely and reliably, with a pluggable power supply from three-phase current.

Screw connection

- 1 x 0.5 to 2.5 mm² with/without wire-end ferrules
- 1 x 4 mm² without wire-end ferrules
- 2 x 0.5 to 1.5 mm² with/without wire-end ferrules
- 2 x 2.5 mm² flexible without wire-end ferrules
- Tightening torque max. 1 Nm

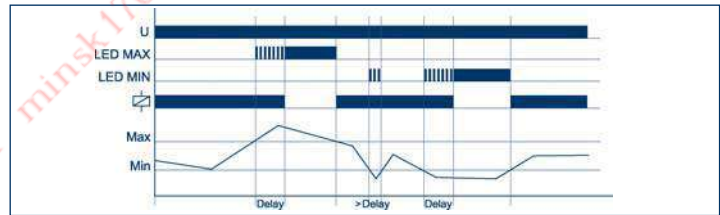
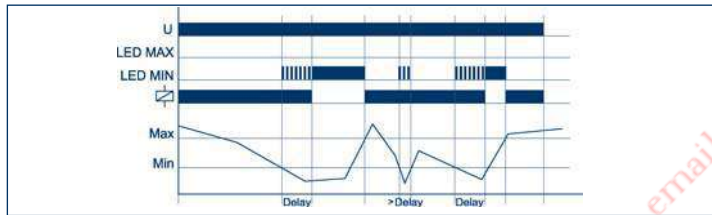


Functional description

During all functions, if the minimum value for the measured voltage has been selected as a larger value than the maximum, then the Min and Max LEDs flash alternately (the relay is in off position). If a system error has occurred when activating the device, then the output relay remains off and the LED for the corresponding threshold illuminates. The device records every phase voltage (L-N) separately and monitors them according to the selection function (UNDER or WINDOW).

Environmental conditions

| | |
|-----------------------|---|
| Ambient temperature | -25 to +55°C (acc. to IEC 68-1) -25/+40°C (UL 508) |
| Storage temperature | -25 to +70°C |
| Transport temperature | -25 to +70°C |
| Relative humidity | 15 % to 85 % (acc. to IEC 721-3-3 Class 3K3) |
| Pollution degree | 3 (acc. to IEC 664-1) |
| Vibration resistance | 10 to 55 Hz 0.35 mm (acc. to IEC 68-2-6) |
| Shock resistance | 15 g 11 ms (acc. to IEC 68-2-27) |

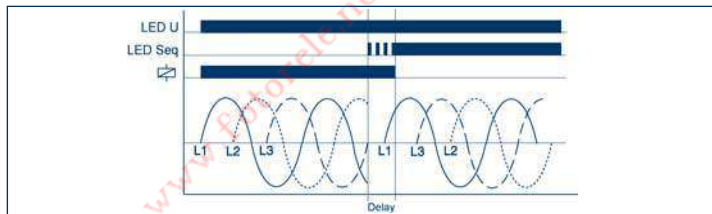


Undervoltage monitoring (UNDER, UNDER+SEQ)

When the measured voltage (one of the phase voltages) falls under the value set at the Min controller, the set triggering delay time begins to run (the red LED Min flashes). The output relay R deactivates (yellow LED not illuminated) after the expiration of the delay time (red LED Min illuminated). If the measured voltage (all phase voltages) exceeds the value set at the Max controller, then the output relay R re-activates (yellow LED illuminated).

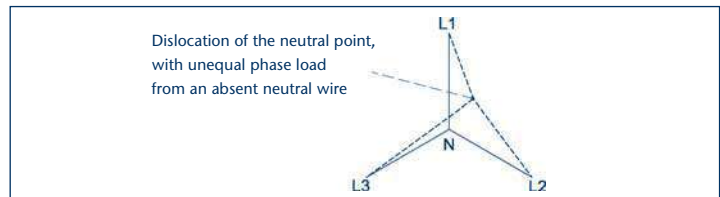
Window function (WIN, WIN+SEQ)

The output relay R activates (yellow LED illuminated) when the measured voltage (all phase voltages) exceeds the set value on the Min controller. When the measured voltage (one of the phase voltages) exceeds the value set at the Max controller, the set triggering delay time begins to run (the red LED max flashes). The output relay R deactivates (yellow LED not illuminated) after the expiration of the delay time (red LED Max illuminated). The output relay re-activates (yellow LED illuminated) when the measured voltage once again falls below the maximum value (red LED Max not illuminated). When the measured voltage (one of the phase voltages) falls under the value set at the Min controller, the set triggering delay time begins to run (the red LED Min flashes). The output relay R deactivates (yellow LED not illuminated) after the expiration of the delay time (red LED Min illuminated).



Monitoring the phase sequence (SEQ)

The monitoring of the phase sequence is selectable for all functions. For single-phase circuits, monitoring of the phase sequence must be turned off. When the rotation direction of the phase changes (red LED SEQ illuminated), the output relay R is deactivated (yellow LED not illuminated) after the triggering delay time expires.



Neutral wire break

The device monitors each phase (L1, L2 and L3) in reference to N. An asymmetrical phase load and a neutral wire breakage in the mains line will result in a dislocation of the neutral point. When one of the phase voltage exceeds the set shutdown threshold (Min or Max), the triggering delay then begins to run (red LED Min or Max flashes). The output relay R deactivates (yellow LED not illuminated) after the expiration of the delay time (red LED Max or Min illuminated).

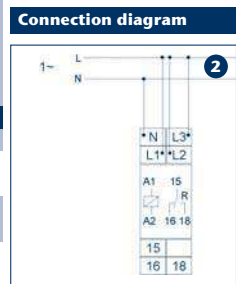
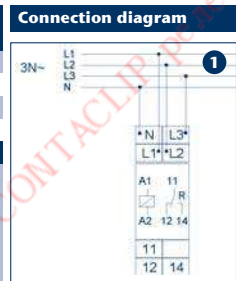
Voltage-monitoring relay VMR

- Mount on TS 35
- Housing made of self-extinguishing plastic, IP40 protection
- Any mounting position possible
- Screw connection terminals protected against accidental touch acc. to VBG 4 IP 20 protection



| |
|--|
| Type |
| Cat. no./Qty. |
| Dimensions |
| Connection diagram |
| Dimensions (L x W x H) TS 35 x 7,5 |
| Weight (individual packaging:module and packaging) |
| Short description |
| Functions |
| UNDER |
| UNDER+SEQ |
| WIN |
| WIN+SEQ |

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| VMR 3 |
| 15958.2/1 |
| 1, 2 |
| 87 x 17.5 x 67.5 mm |
| 72 g |
| Voltage monitoring in three-phase and single-phase systems, multi-function, monitoring for phase loss, monitoring for phase sequence selectable, Monitoring for asymmetrical connection of the neutral wire is optional; 1 CO contact, Width: 17.5 mm Installation design |
| Undervoltage monitoring, under-voltage and phase sequence monitoring |
| Monitoring of the range between the Min and Max. |
| Monitoring of the range between the thresholds Min and Max and phase sequence monitoring |

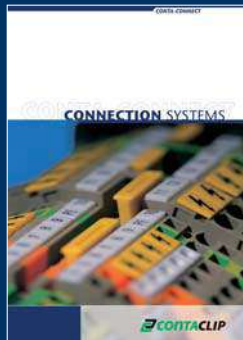


| |
|----------------------------|
| Time delay range |
| Start-up override |
| Output delay |
| Displays |
| Red LED ON/OFF |
| Red LED flashing |
| Yellow LED ON/OFF |
| Supply circuit |
| Supply voltage |
| Terminals |
| Rated voltage UN |
| Tolerance |
| Rated consumption |
| Rated frequency |
| Power-on duration |
| Recovery time |
| Stored energy time |
| Release voltage |
| Overvoltage category |
| Rated impulse voltage |
| Output circuit |
| Rated voltage |
| Switching capacity |
| Fusing |
| Mechanical life span |
| Electrical life span |
| Switching frequency |
| Overvoltage category |
| Rated impulse voltage |
| Measurement circuit |
| Measured value |
| Measurement input |
| Terminals |
| Overload capability |
| Input resistance |
| Asymmetry |
| Overvoltage category |
| Rated impulse voltage |
| Accuracy |
| Basic accuracy |
| Setting tolerance |
| Repeat accuracy |
| Voltage influence |
| Temperature influence |

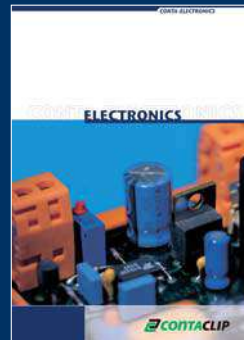
| |
|--|
| Setting range |
| - |
| 0.1 s to 10 s |
| Display error for corr. threshold. |
| Display of triggering delay for corr. threshold |
| Position of output relay |
| (= measuring-circuit voltage) |
| (N)-L1-L2-L3 |
| 3(N)-400/230 V |
| -30 % to +30 % of Un |
| 8 VA (1 W) |
| AC 48 to 63 Hz |
| 100 % |
| 500 ms |
| - |
| >20 % of supply voltage |
| III (acc. to IEC 60664-1) |
| 4 kV |
| 1 potential-free CO contact |
| 250 V AC |
| 1250 VA (5 A / 250 V AC) |
| 5 A fast |
| 20 x 10 ⁶ switching cycles |
| 2 x 10 ⁵ switching cycles at 1000 VA resistive load |
| Max. 60/min at 100 VA resistive load |
| Max. 6/min at 1000 VA resistive load (acc. to IEC 947-5-1) |
| III (acc. to IEC 60664-1) |
| 4 kV |
| 3(N)-, Sinus, 48 to 63 Hz |
| (= supply voltage) |
| (N)-L1-L2-L3 |
| Def. by tolerance of supply voltage |
| 80 %–130 % of UN |
| 70 %–120 % of UN |
| III (acc. to IEC 60664-1) |
| 4 kV |
| ±5% of scale limit |
| ≤5 % of scale limit |
| ≤2 % |
| - |
| ≤1 % |



CONTA-CONNECT
[Connection Systems]



CONTA-ELECTRONICS
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CONTA-CON
[PCB Connectors]



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