

Relay modules

Industrial relay system with push-in connection - RIFLINE complete

Plug-in miniature power relays

Plug-in miniature power relays with 1 or 2 PDT contacts, suitable for RIF-1, PR1, and PLC-INTERFACE relay bases.

The advantages:

- Power contacts up to 16 A
- Multi-layer gold contact or power contact
- High degree of protection up to RT III (comparable with IP67) depending on type

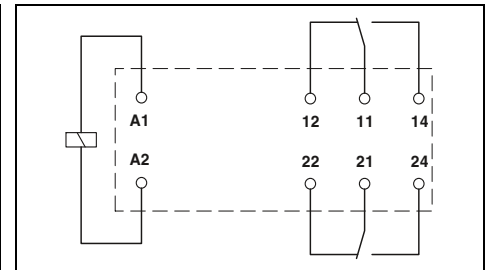
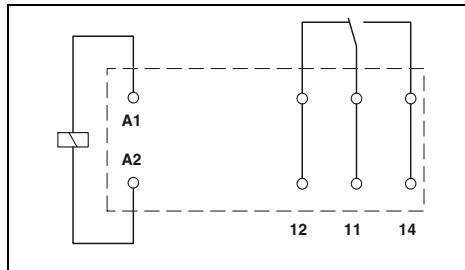


1 PDT relay



2 PDT relay

Notes:
If the specified maximum values for multi-layer contact relays are exceeded, the gold plating is destroyed. The maximum values of the power contact relay are then valid. This can result in a shorter service life than with a pure power contact.



Technical data

| Input data | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ |
|--|-------------|----|-----|-----|-----|--------|--------|--------|
| Permissible range (with reference to U_N) | see diagram | | | | | | | |
| Typ. input current at U_N [mA] | 33 | 17 | 8.7 | 8.2 | 4.1 | 32 | 7 | 3 |
| Typ. response time at U_N [ms] | 7 | 7 | 7 | 7 | 7 | | | |
| Typ. response time at U_N (depending on phase relation) [ms] | | | | | | 3 - 12 | 3 - 12 | 3 - 12 |
| Typ. release time at U_N [ms] | 3 | 3 | 3 | 3 | 3 | | | |
| Typ. release time at U_N (depending on phase relation) [ms] | | | | | | 2 - 9 | 2 - 9 | 2 - 9 |

| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ |
|-------------|----|-----|-----|-----|--------|--------|--------|
| see diagram | | | | | | | |
| 33 | 17 | 8.7 | 8.2 | 4.1 | 32 | 7 | 3 |
| 7 | 7 | 7 | 7 | 7 | | | |
| | | | | | 3 - 12 | 3 - 12 | 3 - 12 |
| 3 | 3 | 3 | 3 | 3 | | | |
| | | | | | 2 - 9 | 2 - 9 | 2 - 9 |

Technical data

| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ |
|-------------|----|-----|-----|-----|--------|--------|--------|
| see diagram | | | | | | | |
| 33 | 17 | 8.7 | 8.2 | 4.1 | 32 | 7 | 3 |
| 7 | 7 | 7 | 7 | 7 | | | |
| | | | | | 3 - 12 | 3 - 12 | 3 - 12 |
| 3 | 3 | 3 | 3 | 3 | | | |
| | | | | | 2 - 9 | 2 - 9 | 2 - 9 |

| Output data |
|-------------------------------------|
| Contact type |
| Contact material |
| Max. switching voltage |
| Min. switching voltage |
| Limiting continuous current |
| Max. inrush current, AC |
| Max. inrush current, DC |
| Min. switching current |
| General data |
| Test voltage (winding/contact) |
| Test voltage (contact/contact) |
| Ambient temperature (operation), AC |
| Ambient temperature (operation), DC |
| Mechanical service life, AC |
| Mechanical service life, DC |
| Standards/regulations |

| 1 PDT | 1 PDT |
|--------------------------------|------------------------|
| AgNi | AgNi, hard gold-plated |
| 250 V AC/DC | 30 V AC / 36 V DC |
| 12 V (at 10 mA) | 100 mV (at 10 mA) |
| 16 A | 50 mA |
| 25 A (20 ms) | 50 mA |
| 50 A (20 ms) | 50 mA |
| 10 mA (at 12 V) | 1 mA (at 24 V) |
| 5 kV AC (50 Hz, 1 min.) | |
| - | |
| -40 °C ... 85 °C | |
| -40 °C ... 85 °C | |
| 1 x 10 ⁷ cycles | |
| 3 x 10 ⁷ cycles | |
| IEC 60664, EN 50178, IEC 62103 | |

| 2 PDT | 2 PDT |
|--------------------------------|------------------------|
| AgNi | AgNi, hard gold-plated |
| 250 V AC/DC | 30 V AC / 36 V DC |
| 5 V (at 10 mA) | 100 mV (at 10 mA) |
| 8 A | 50 mA |
| 12 A (20 ms) | 50 mA |
| 25 A (20 ms) | 50 mA |
| 10 mA (at 5 V) | 1 mA (at 24 V) |
| 5 kV AC (50 Hz, 1 min.) | |
| 2.5 kV AC (50 Hz, 1 min.) | |
| -40 °C ... 85 °C | |
| -40 °C ... 85 °C | |
| 1 x 10 ⁷ cycles | |
| 3 x 10 ⁷ cycles | |
| IEC 60664, EN 50178, IEC 62103 | |

Ordering data

| Description | Input voltage U_N |
|--------------------------------------|---------------------|
| Plug-in miniature power relay | |
| with power contacts | ① 12 V DC |
| with power contacts | ② 24 V DC |
| with power contacts | ③ 48 V DC |
| with power contacts | ④ 60 V DC |
| with power contacts | ⑤ 110 V DC |
| with power contacts | ⑥ 24 V AC |
| with power contacts | ⑦ 120 V AC |
| with power contacts | ⑧ 230 V AC |
| Plug-in miniature power relay | |
| with multi-layer gold contacts | ① 12 V DC |
| with multi-layer gold contacts | ② 24 V DC |
| with multi-layer gold contacts | ③ 48 V DC |
| with multi-layer gold contacts | ④ 60 V DC |
| with multi-layer gold contacts | ⑤ 110 V DC |
| with multi-layer gold contacts | ⑥ 24 V AC |
| with multi-layer gold contacts | ⑦ 120 V AC |
| with multi-layer gold contacts | ⑧ 230 V AC |

| Type | Order No. | Pcs. / Pkt. |
|----------------------|-----------|-------------|
| REL-MR- 12DC/21HC | 2961309 | 10 |
| REL-MR- 24DC/21HC | 2961312 | 10 |
| REL-MR- 48DC/21HC | 2834821 | 10 |
| REL-MR- 60DC/21HC | 2961325 | 10 |
| REL-MR-110DC/21HC | 2961338 | 10 |
| REL-MR- 24AC/21HC | 2961406 | 10 |
| REL-MR-120AC/21HC | 2961419 | 10 |
| REL-MR-230AC/21HC | 2961422 | 10 |
| REL-MR- 12DC/21HC AU | 2961532 | 10 |
| REL-MR- 24DC/21HC AU | 2961545 | 10 |
| REL-MR-110DC/21HC AU | 2961561 | 10 |
| REL-MR- 24AC/21HC AU | 2961503 | 10 |
| REL-MR-120AC/21HC AU | 2961516 | 10 |
| REL-MR-230AC/21HC AU | 2961529 | 10 |

Ordering data

| Type | Order No. | Pcs. / Pkt. |
|----------------------|-----------|-------------|
| REL-MR- 12DC/21-21 | 2961257 | 10 |
| REL-MR- 24DC/21-21 | 2961192 | 10 |
| REL-MR- 48DC/21-21 | 2834834 | 10 |
| REL-MR- 60DC/21-21 | 2961273 | 10 |
| REL-MR-110DC/21-21 | 2961202 | 10 |
| REL-MR- 24AC/21-21 | 2961435 | 10 |
| REL-MR-120AC/21-21 | 2961448 | 10 |
| REL-MR-230AC/21-21 | 2961451 | 10 |
| REL-MR- 12DC/21-21AU | 2961299 | 10 |
| REL-MR- 24DC/21-21AU | 2961215 | 10 |
| REL-MR- 48DC/21-21AU | 2834847 | 10 |
| REL-MR- 60DC/21-21AU | 2961286 | 10 |
| REL-MR-110DC/21-21AU | 2961228 | 10 |
| REL-MR- 24AC/21-21AU | 2961464 | 10 |
| REL-MR-120AC/21-21AU | 2961477 | 10 |
| REL-MR-230AC/21-21AU | 2961480 | 10 |