






R3N

miniature industrial relays



10 A / 250 V AC

- Relays of general application • For plug-in sockets: 35 mm rail mount acc. to PN-EN 60715; on panel mounting
- Miniature dimensions • Cadmium - free contacts • AC and DC coils
- WT (mechanical indicator + lockable front test button) - standard features of relays. Relays may be provided with the test buttons (no latching) and plugs - page 10
- Recognitions, certifications, directives: RoHS,     

Contact data

| | | |
|--------------------------------|------|--|
| Number and type of contacts | | 3 CO |
| Contact material | | AgNi , AgNi/Au flash gold plating |
| Rated / max. switching voltage | AC | 250 V / 440 V |
| Min. switching voltage | | 10 V |
| Rated load (capacity) | AC1 | 10 A / 250 V AC |
| | AC15 | 3 A / 120 V 1,5 A / 240 V (B300) |
| | AC3 | 370 W (single-phase motor) |
| | DC1 | 10 A / 24 V DC (see Fig. 3) |
| | DC13 | 0,22 A / 120 V 0,1 A / 250 V (R300) |
| Min. switching current | | 5 mA |
| Max. inrush current | | 20 A |
| Rated current | | 10 A |
| Max. breaking capacity | AC1 | 2 500 VA |
| Min. breaking capacity | | 0,3 W |
| Contact resistance | | ≤ 100 mΩ |
| Max. operating frequency | | |
| • at rated load | AC1 | 1 200 cycles/hour |
| • no load | | 18 000 cycles/hour |

Coil data

| | | |
|-----------------------------------|-------------|---|
| Rated voltage | 50/60 Hz AC | 6 ... 240 V |
| | DC | 5 ... 220 V |
| Must release voltage | | AC: ≥ 0,2 U _n DC: ≥ 0,1 U _n |
| Operating range of supply voltage | | see Tables 1, 2 |
| Rated power consumption | AC | 1,6 VA |
| | DC | 0,9 W |

Insulation according to PN-EN 60664-1

| | | |
|-----------------------------|--|---|
| Insulation rated voltage | | 250 V AC |
| Rated surge voltage | | 4 000 V 1,2 / 50 μs |
| Overvoltage category | | III |
| Insulation pollution degree | | 2 |
| Dielectric strength | | |
| • between coil and contacts | | 2 500 V AC type of insulation: basic |
| • contact clearance | | 1 500 V AC type of clearance: micro-disconnection |
| • pole - pole | | 2 500 V AC type of insulation: basic |
| Contact - coil distance | | |
| • clearance | | ≥ 2,5 mm |
| • creepage | | ≥ 4 mm |

General data

| | | |
|---|-------------|-----------------------------------|
| Operating / release time (typical values) | | AC: 10 ms / 8 ms DC: 13 ms / 3 ms |
| Electrical life | | |
| • resistive AC1 | | > 10 ⁵ 10 A, 250 V AC |
| • cosφ | | see Fig. 2 |
| Mechanical life (cycles) | | > 2 x 10 ⁷ |
| Dimensions (L x W x H) | | 27,4 x 21 x 35,5 mm |
| Weight | | 35 g |
| Ambient temperature | • storage | -40...+85 °C |
| | • operating | AC: -40...+55 °C DC: -40...+70 °C |
| Cover protection category | | IP 40 PN-EN 60529 |
| Environmental protection | | RTI PN-EN 116000-3 |
| Shock resistance | (NO/NC) | 10 g / 5 g |
| Vibration resistance | | 5 g 10...150 Hz |

The data in bold type relate to the standard versions of the relays.

19.04.2016