



- Cadmium - free contacts
- Miniature size
- Automotive applications
- High inrush current
- Dust cover available
- PCB mounting

Contacts

| | | | |
|---------------------------------|--|-------|------------|
| Contact number & arrangement | see Table 1 | | |
| Contact material | AgSnO ₂ ; AgSnO ₂ /Au 0,2 μm | | |
| Voltage | | | |
| Max. switching voltage AC/DC | 60 V / 60 V | | |
| Min. switching voltage | 1 V | | |
| Current | 1C/O | 1NO | 2NO |
| Min. switching current | 10 mA | 10 mA | 10 mA |
| Max. inrush current | 110 A / 50 A (1NO/1NC) | 110 A | 2 x 110 A |
| Rated current | 20 A / 12 A (1NO/1NC) | 20 A | 2 x 12,5 A |
| Max. breaking capacity | 270 W / 162 W (1NO/1NC) | 270 W | 2 x 168 W |
| Min. breaking capacity | 1 W | 1 W | 1 W |
| Resistance | ≤ 3 mΩ | | |
| Max. operating frequency | | | |
| • at rated load | 900 cycles/hour (2 s ON/ 2 s OFF) | | |
| • at motor load | 450 cycles/hour (2 s ON/ 6 s OFF) | | |
| • at lamp load | 120 cycles/hour (2 s ON/ 30 s OFF) | | |
| • no load | 36 000 cycles/hour | | |

Coil

| | |
|-----------------------------------|-----------------------|
| Voltage | |
| Rated voltage | 5...48 V DC |
| Must operate voltage (20°C) | ≤ 0,6 U _n |
| Must release voltage | ≥ 0,15 U _n |
| Operating range of supply voltage | see Table 1 |
| Rated power consumption | 1,44 W |

Insulation

| | |
|------------------------------|----------|
| Voltage | |
| Insulation rated voltage | 60 V AC |
| Dielectric strength: | |
| • coil-contact | 500 V AC |
| • contact-contact | 500 V AC |
| Contact-coil distance | |
| • clearance | ≥ 1 mm |
| • creepage | ≥ 1 mm |

General data

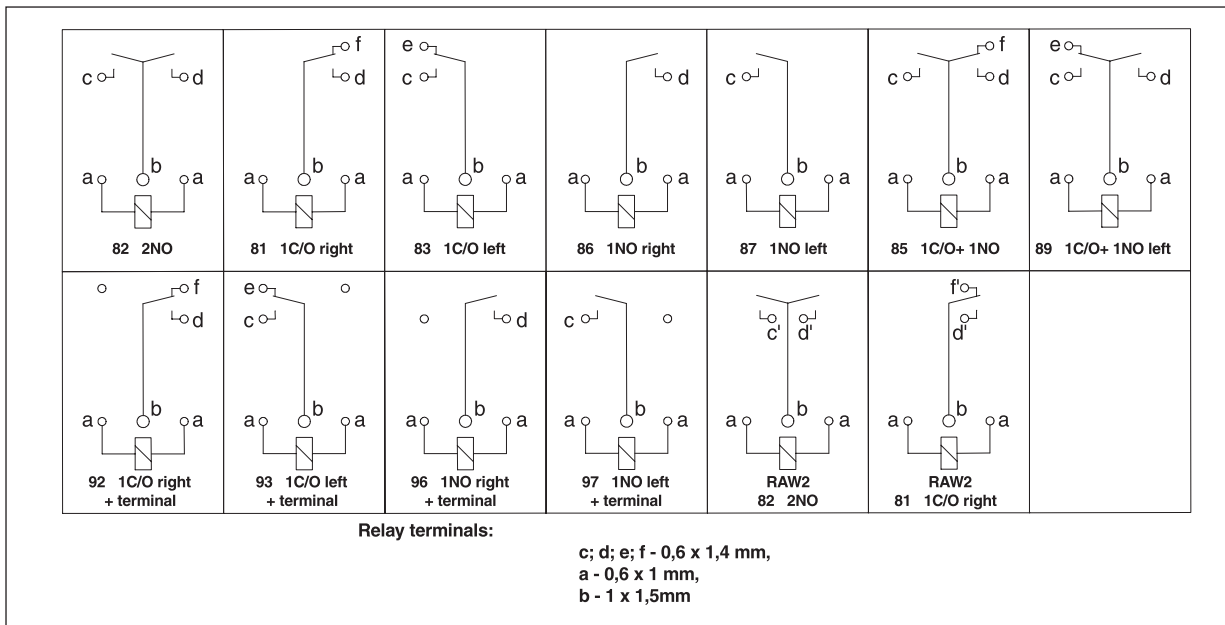
| | |
|--------------------------------|---|
| Operating time (typical value) | 10 ms |
| Release time (typical value) | 3 ms |
| Electrical life | |
| • for 1C/O version | > 10 ⁵ at 20/12 A (1NO/1NC); 13,5 V DC |
| • for 1N/O version | > 10 ⁵ at 20 A; 13,5 V DC |
| • for 2N/O version | > 10 ⁵ at 2 x 12,5 A; 13,5 V DC |
| Mechanical life (cycles) | > 10 ⁷ |
| Dimensions (L x W x H) | 18,6 x 13 x 18,5 mm (IP 00 - without cover) 15,3 x 20,5 x 19,7 mm (IP 40 - with cover) |
| Weight | 12 g |
| Ambient temperature | |
| • storing | -40...+100 °C |
| • operating | -40...+85 °C |
| Cover protection category | IP 00 or IP 40 |
| Solder bath temperature | max. 270 °C |
| Soldering time | max. 5 s |
| Approvals | GOST |

Coil data

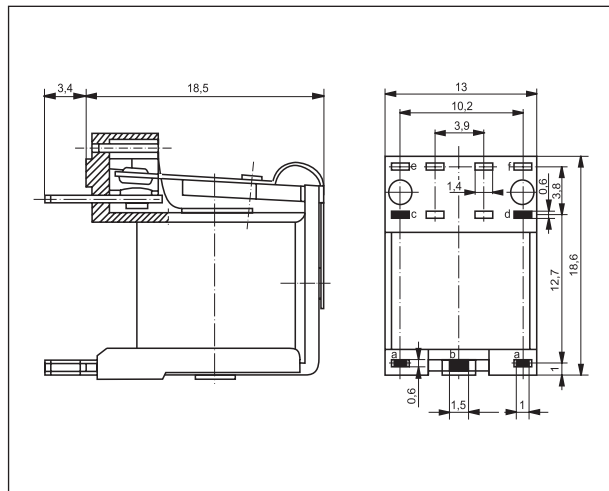
Table 1

| Coil code | Rated voltage V DC | Coil resistance (±10%) at 20 °C | Coil operating range at 85 °C V DC | |
|-----------|-----------------------|------------------------------------|---------------------------------------|------|
| | | | min. | max. |
| 1005 | 5 | 18 | 4,0 | 6,6 |
| 1006 | 6 | 24 | 4,8 | 8,0 |
| 1009 | 9 | 55 | 7,2 | 12,0 |
| 1012 | 12 | 100 | 9,6 | 16,0 |
| 1015 | 15 | 152 | 12,0 | 20,0 |
| 1018 | 18 | 230 | 14,4 | 23,9 |
| 1024 | 24 | 390 | 19,2 | 31,9 |
| 1048 | 48 | 1 590 | 38,4 | 63,8 |

Connections diagram (pin side view)

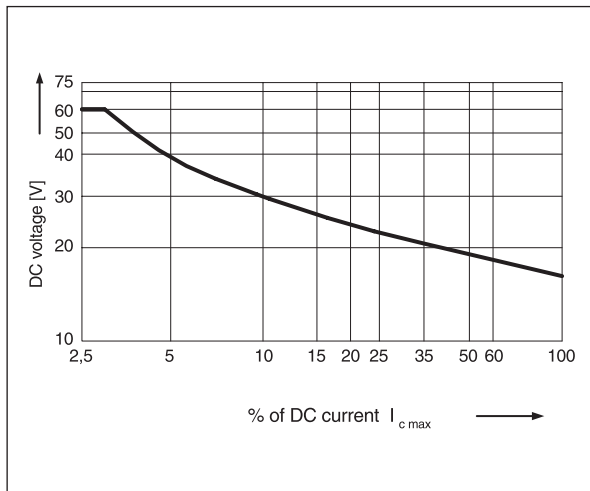


Dimensions



Max. DC resistive load breaking capacity

Fig. 1



Mounting

Relays **RA2** are designed for direct PCB mounting.

Ordering codes

