



- General purpose relays
- High inrush current
- Plug-in, solder, PCB, connector mounting
- Covers with mounting flange available

Contacts

| | |
|---------------------------------|--|
| Contact number & arrangement | 2C/O, 3C/O, 2NO, 3NO |
| Contact material | AgCdO |
| Voltage | |
| Max. switching voltage AC/DC | 400 V / 400 V |
| Min. switching voltage | 10 V |
| Current | |
| Rated load | AC1 DC1 |
| Min. switching current | 16 A / 250 V AC or 10 A / 380 V AC 16 A / 24 V DC |
| Max. inrush current | 10 mA |
| Rated current | 40 A |
| Max. breaking capacity | 16 A |
| Min. breaking capacity | 4 000 VA |
| Resistance | 0,5 W |
| Max. operating frequency | $\leq 100 \text{ m}\Omega$ at 1 A, 24 V |
| • at rated load | 1 200 cycles/hour |
| • no load | 12 000 cycles/hour |

Coil

| | |
|-----------------------------------|---------------------------------------|
| Voltage | |
| Rated voltage | 6...220 V DC |
| Must release voltage | 6...380 V AC 50 Hz, 50/60 Hz |
| Operating range of supply voltage | $\geq 0,1 U_n$ DC; $\geq 0,15 U_n$ AC |
| Rated power consumption | see Tables 1, 2, 3 |
| | 1,5 W DC |
| | 2,8 VA AC 50 Hz; 2,5 VA AC 60 Hz |

Insulation

| | |
|------------------------------|---|
| Insulation category | C400 |
| Voltage | |
| Insulation rated voltage | 400 V AC |
| Dielectric strength: | |
| • coil-contact | 2 500 V AC |
| • contact-contact | 1 500 V AC (2 500 V AC contact-contact ≥ 3 mm) |
| • pole-pole | 2 500 V AC |
| Contact-coil distance | |
| • clearance | ≥ 6 mm |
| • creepage | ≥ 8 mm |

General data

| | |
|--------------------------------|--|
| Operating time (typical value) | 12 ms AC, 12 ms DC |
| Release time (typical value) | 10 ms AC, 7 ms DC |
| Electrical life | |
| • resistive | $\geq 10^5$ at 16 A, 250 V AC |
| • $\cos \varphi$ | see Fig. 2 |
| Mechanical life (cycles) | $\geq 10^7$ |
| Dimensions (L x W x H) | 38,6 x 36,1 x 45,5 mm |
| Weight | 85 g |
| Ambient temperature | |
| • storing | -40...+85 °C |
| • operating | -40...+70 °C (for 10 A on contact) -40...+55 °C (for 16 A on contact) |
| Cover protection category | IP 40 |
| Shock resistance | 10 g |
| Vibration resistance | 5 g for 10...150 Hz |
| Solder bath temperature | max. 270 °C |
| Soldering time | max. 5 s |
| Approvals | B, UL, CSA, GOST |

Coil data - DC version

Table 1

| Coil code | Rated voltage V DC | Coil resistance (±10%) at 20 °C Ω | Coil operating range V DC | |
|-------------|-----------------------|---|------------------------------|----------------|
| | | | min. (at 20°C) | max. (at 55°C) |
| 1006 | 6 | 28 | 4,8 | 6,6 |
| 1012 | 12 | 110 | 9,6 | 13,2 |
| 1024 | 24 | 430 | 19,2 | 26,4 |
| 1042 | 42 | 1 340 | 33,6 | 46,2 |
| 1048 | 48 | 1 750 | 38,4 | 52,8 |
| 1060 | 60 | 2 700 | 48,0 | 66,0 |
| 1110 | 110 | 9 200 | 88,0 | 121,0 |
| 1120 | 120 | 11 000 | 96,0 | 132,0 |
| 1220 | 220 | 37 000 | 176,0 | 242,0 |

Coil data - AC 50 Hz version

Table 2

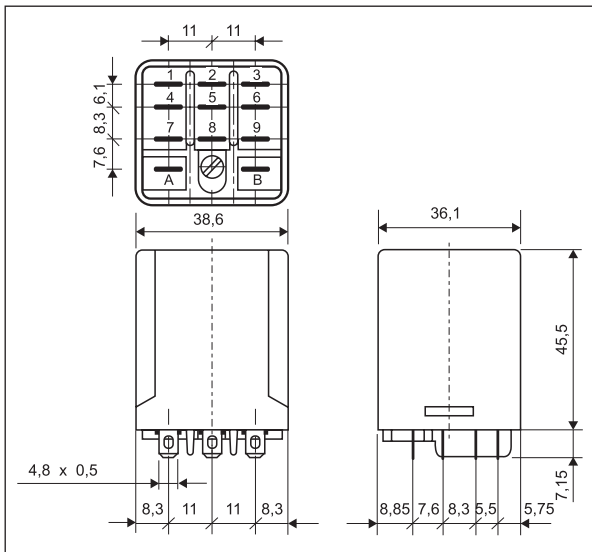
| Coil code | Rated voltage V AC | Coil resistance (±15%) at 20 °C Ω | Coil operating range V AC | |
|-------------|-----------------------|---|------------------------------|----------------|
| | | | min. (at 20°C) | max. (at 55°C) |
| 3006 | 6 | 5,3 | 4,8 | 6,6 |
| 3012 | 12 | 20 | 9,6 | 13,2 |
| 3024 | 24 | 88 | 19,2 | 26,4 |
| 3110 | 110 | 2 000 | 88,0 | 121,0 |
| 3120 | 120 | 2 300 | 96,0 | 132,0 |
| 3220 | 220 | 7 200 | 176,0 | 242,0 |
| 3230 | 230 | 7 900 | 184,0 | 253,0 |
| 3240 | 240 | 8 300 | 192,0 | 264,0 |
| 3380 | 380 | 20 500 | 304,0 | 418,0 |

Coil data - AC 50/60 Hz version

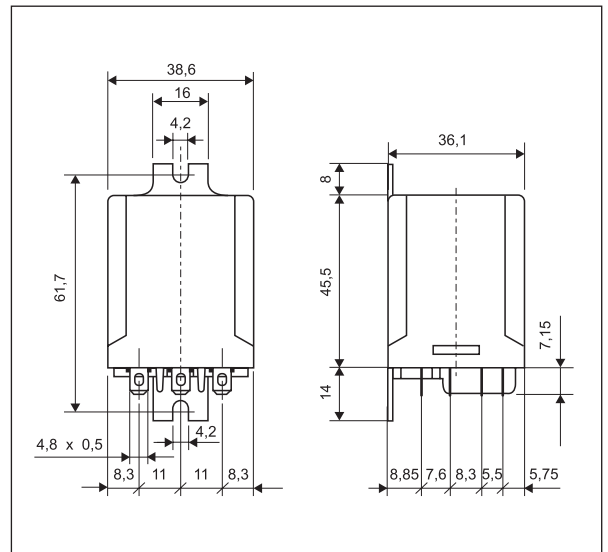
Table 3

| Coil code | Rated voltage V AC | Coil resistance (±15%) at 20 °C Ω | Coil operating range V AC | |
|-------------|-----------------------|---|------------------------------|----------------|
| | | | min. (at 20°C) | max. (at 55°C) |
| 5006 | 6 | 4,3 | 4,8 | 6,6 |
| 5012 | 12 | 18,5 | 9,6 | 13,2 |
| 5024 | 24 | 75 | 19,2 | 26,4 |
| 5110 | 110 | 1 700 | 88,0 | 121,0 |
| 5120 | 120 | 1 910 | 96,0 | 132,0 |
| 5220 | 220 | 6 980 | 176,0 | 242,0 |
| 5230 | 230 | 7 080 | 184,0 | 253,0 |
| 5240 | 240 | 7 760 | 192,0 | 264,0 |
| 5380 | 380 | 19 100 | 304,0 | 418,0 |

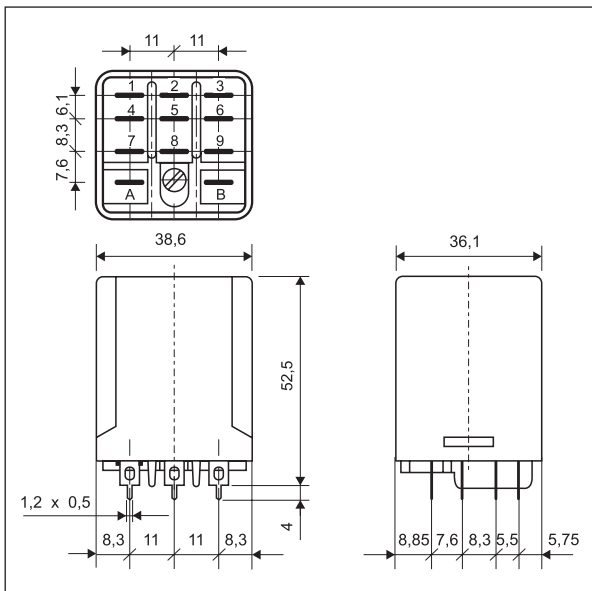
Dimensions - standard cover version



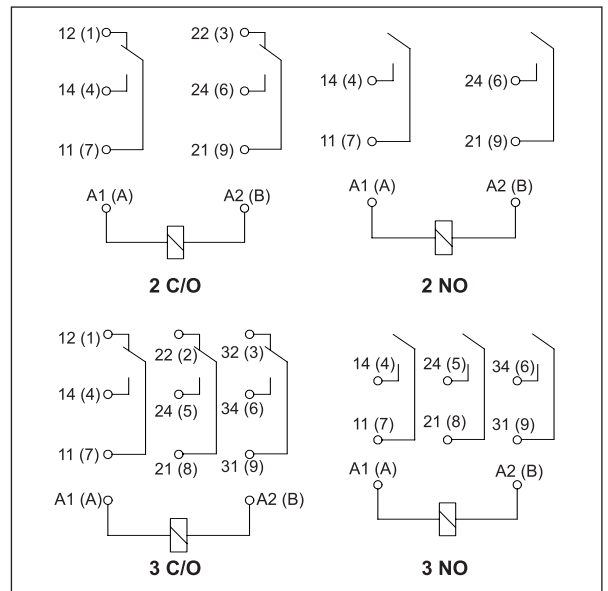
Dimensions - cover with mounting flange



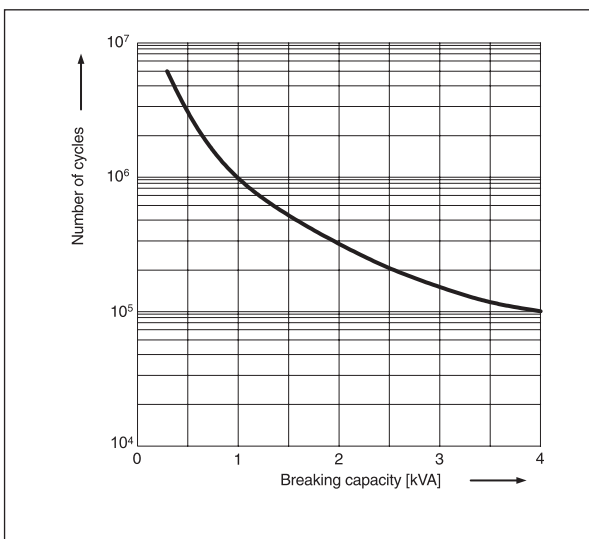
Dimensions - PCB version



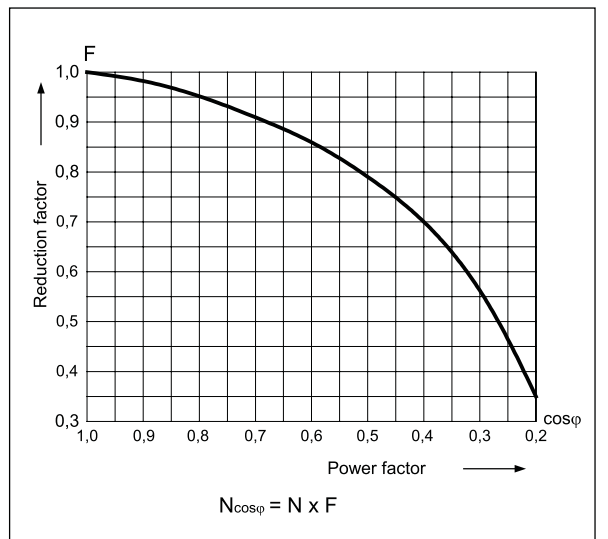
Connections diagram (pin side view)



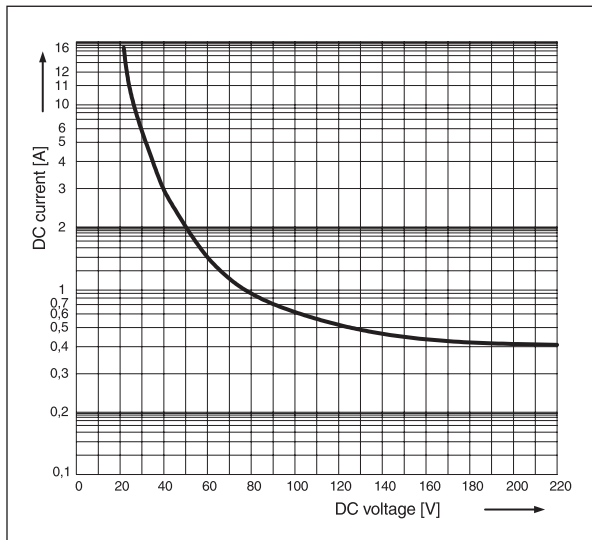
Electrical life at AC resistive load Fig. 1



Electrical life reduction factor at AC inductive load Fig. 2



Max. DC resistive load breaking capacity Fig. 3



Mounting

- Relays **RUC** are designed for:
- screw terminals sockets **GUC11** (modules and clips available) - for DIN rail mounting,
 - fast-on connector,
 - direct PCB mounting.

Ordering codes

