- 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	16 A / 250 V AC or 10 A / 380 V AC
DC1	16 A / 24 V DC
Min. switching current	10 mA
Max. inrush current	40 A
Rated current	16 A
Max. breaking capacity	4 000 VA
Min. breaking capacity	0,5 W
Resistance	≤ 100 mΩ at 1 A, 24 V
Max. operating frequency	
• at rated load	1 200 cycles/hour
• no load	12 000 cycles/hour

Coil

Voltage	
Rated voltage	6...220 V DC 6...380 V AC 50 Hz, 50/60 Hz
Must release voltage	≥ 0,1 U_n DC; ≥ 0,15 U_n AC
Operating range of supply voltage	see Tables 1, 2, 3
Rated power consumption	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	≥ 10^5 at 16 A, 250 V AC
• cos φ	see Fig. 2
Mechanical life (cycles)	≥ 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

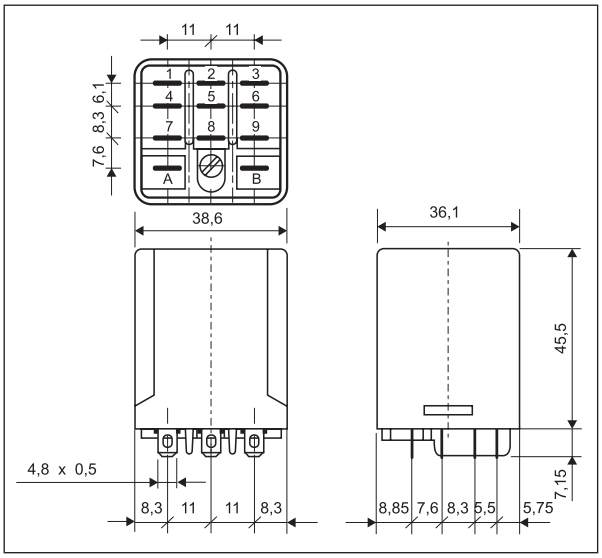
Coil code	Rated voltage V AC	Coil resistance (±15%) at 20 °C Ω	Coil operating range V AC	
			min. (at 20°C)	max. (at 55°C)
3006	6	5,3	4,8	6,6
3012	12	20	9,6	13,2
3024	24	88	19,2	26,4
3110	110	2 000	88,0	121,0
3120	120	2 300	96,0	132,0
3220	220	7 200	176,0	242,0
3230	230	7 900	184,0	253,0
3240	240	8 300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

Coil data - AC 50/60 Hz version

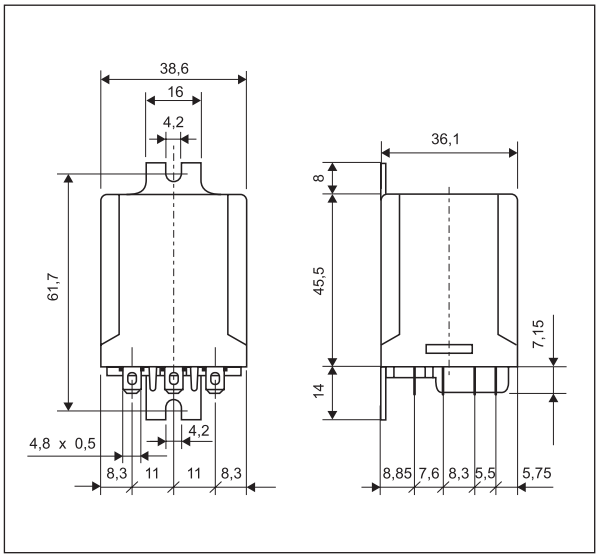
Table 3

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

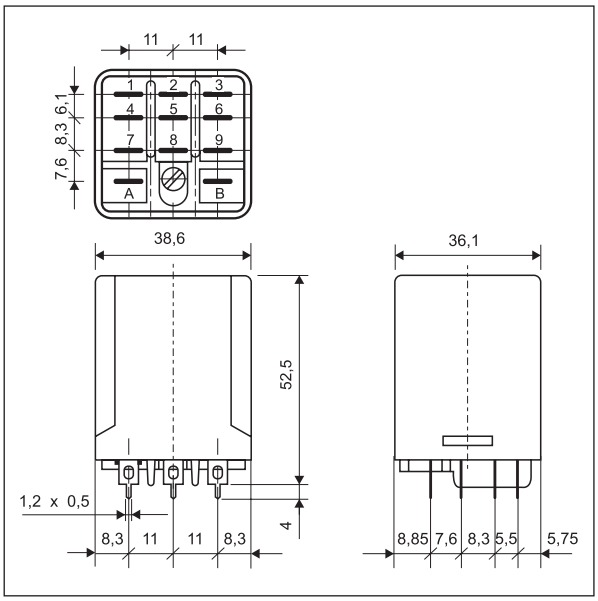
Dimensions - standard cover version



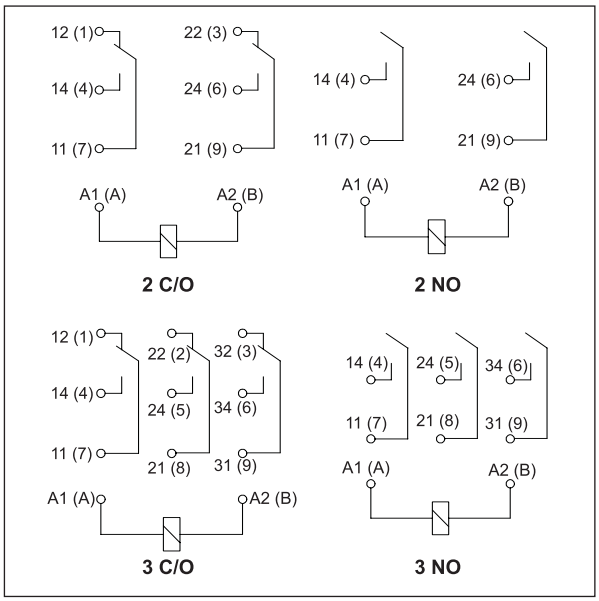
Dimensions - cover with mounting flange



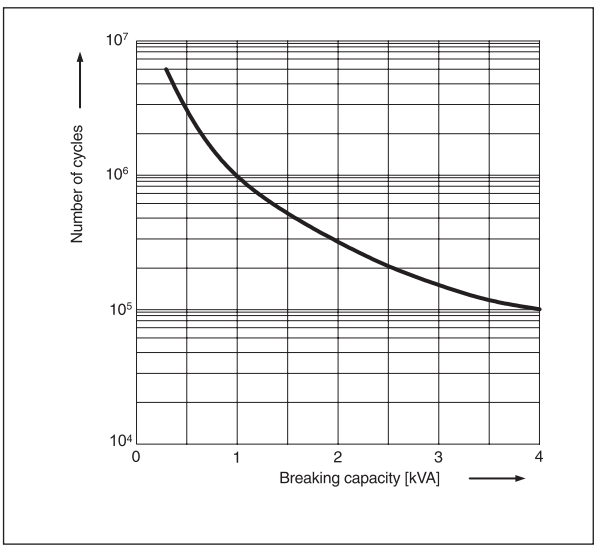
Dimensions - PCB version



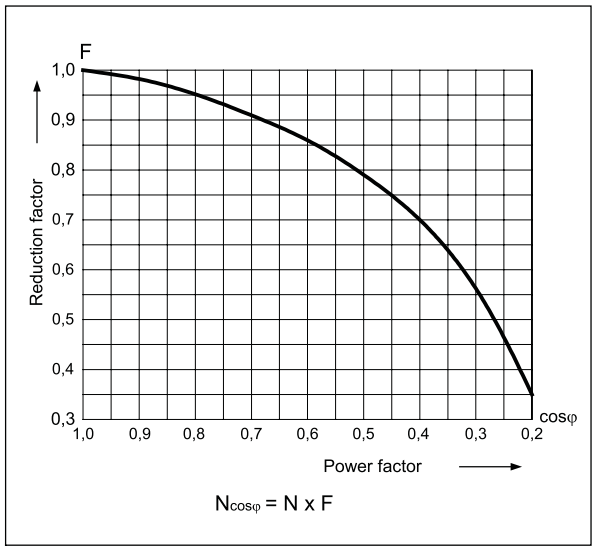
Connections diagram (pin side view)



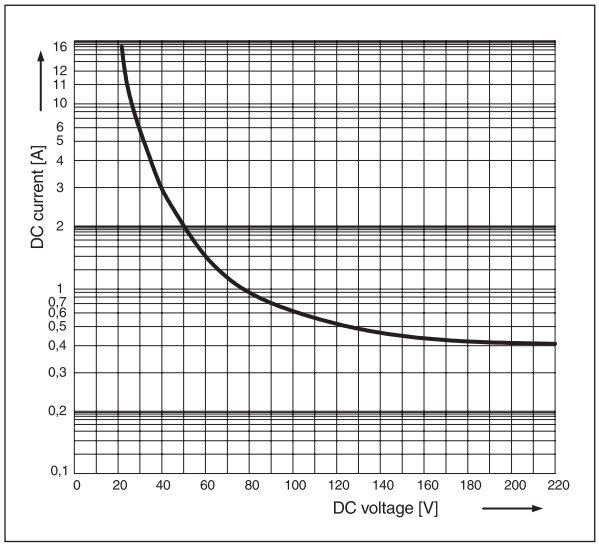
Electrical life at AC resistive load Fig. 1



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