



- 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	16 A / 250 V AC or 10 A / 380 V AC 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 ($\pm 10\%$) 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

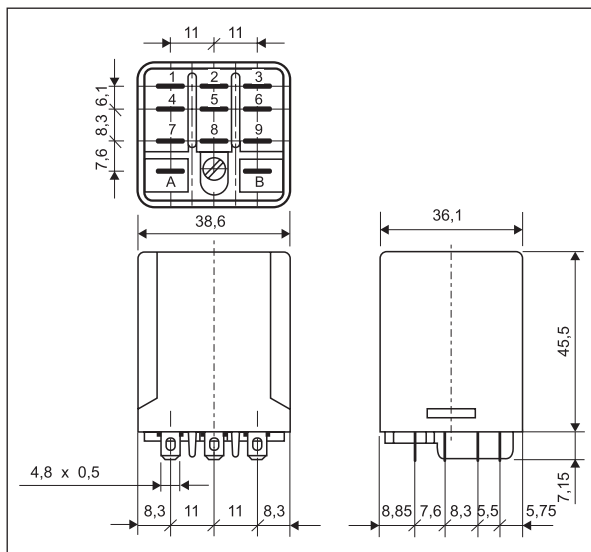
Coil code	Rated voltage V AC	Coil resistance ($\pm 15\%$) at 20 °C Ω	Coil operating range V AC	
			min. (at 20°C)	max. (at 55°C)
3006	6	5,3	4,8	6,6
3012	12	20	9,6	13,2
3024	24	88	19,2	26,4
3110	110	2 000	88,0	121,0
3120	120	2 300	96,0	132,0
3220	220	7 200	176,0	242,0
3230	230	7 900	184,0	253,0
3240	240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

Coil data - AC 50/60 Hz version

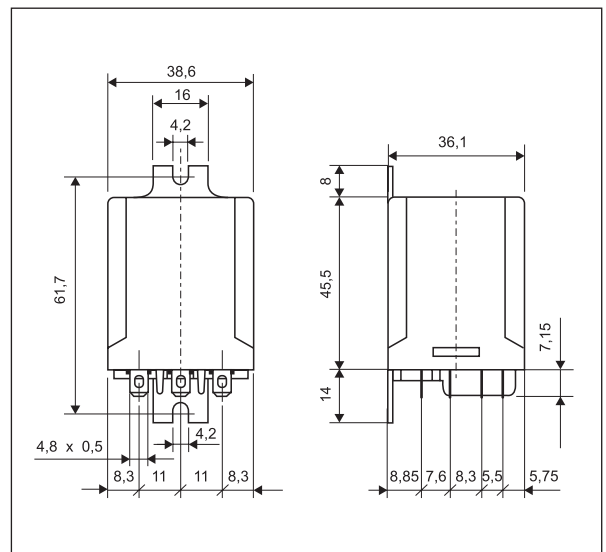
Table 3

Coil code	Rated voltage V AC	Coil resistance ($\pm 15\%$) 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

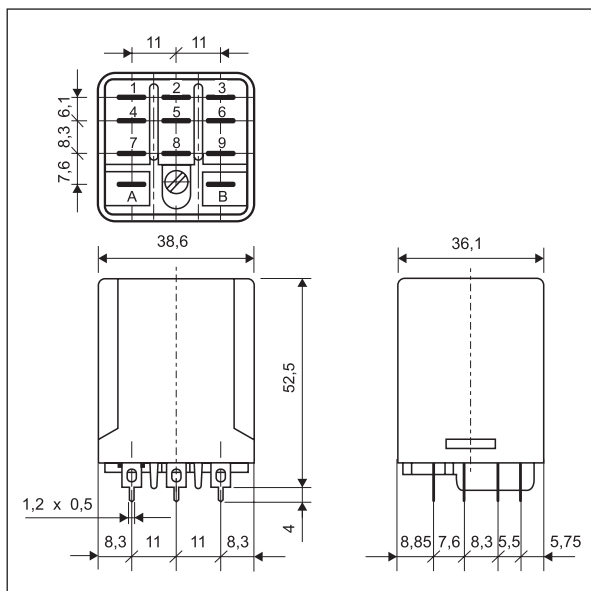
Dimensions - standard cover version



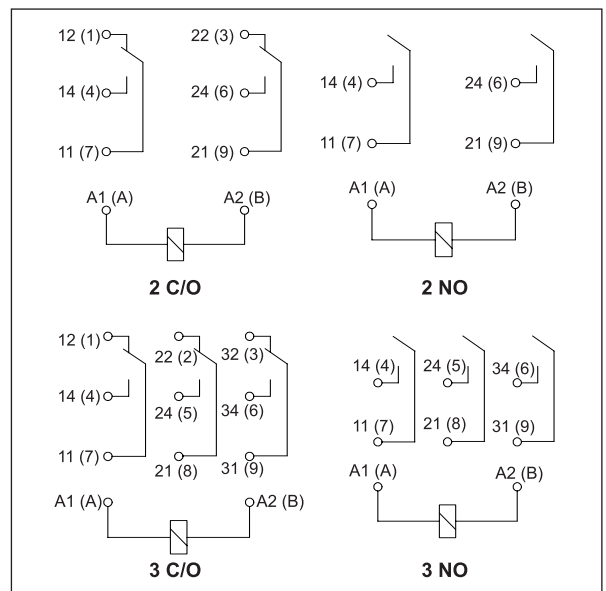
Dimensions - cover with mounting flange



Dimensions - PCB version

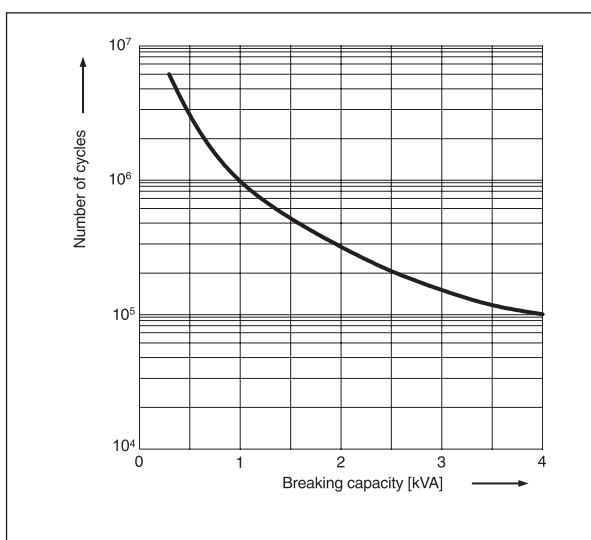


Connections diagram (pin side view)



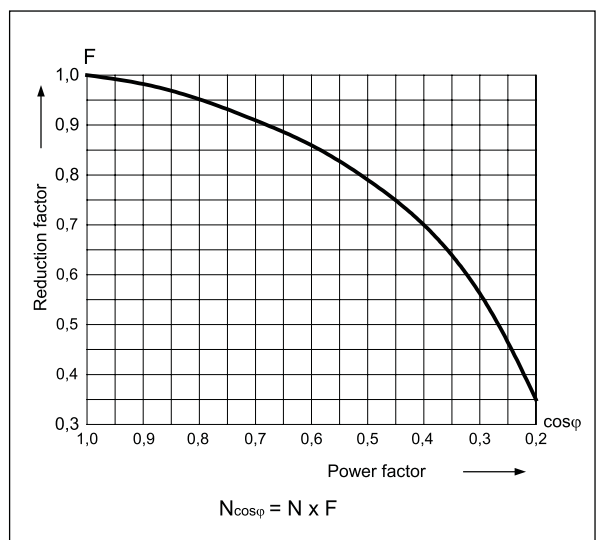
Electrical life at AC resistive load

Fig. 1



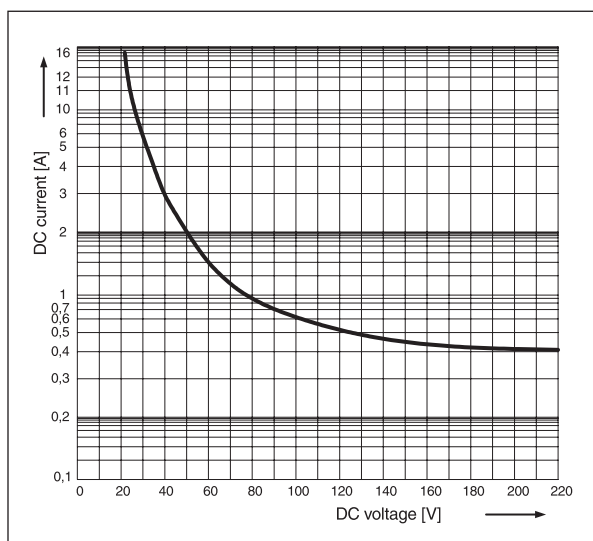
Electrical life reduction factor at AC inductive load

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

