



- Miniature size
- General purpose relay
- High inrush current purposes (120 A) - lamp load (1NO, AgSnO₂ version)
- Contact gap 0,6 mm / dielectric strength contact-contact 2 000 V (1NO, AgSnO₂ version) + available
- Sensitive coil 110 V available
- IP 40 • PCB and plug-in mounting • Wide range of accessories

Contacts

Contact number & arrangement		1C/O, 1NO, 1NC
Contact material		AgCdO , AgCdO/Au 0,2 μm, AgSnO ₂
Max. switching voltage	AC/DC	400 V / 250 V
Min. switching voltage		10 V AgCdO, 10 V AgCdO/Au 0,2 μm, 10 V AgSnO ₂
Rated load	AC1 DC1	16 A / 250 V AC 16 A / 24 V DC
Min. switching current		5 mA AgCdO, 5 mA AgCdO/Au 0,2 μm, 10 mA AgSnO ₂
Max. inrush current		120 A for 1NO, AgSnO ₂
Rated current		16 A
Max. breaking capacity	AC1	4 000 VA
Min. breaking capacity		0,5 W AgCdO, 0,5 W AgCdO/Au 0,2 μm, 1 W AgSnO ₂
Resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load	AC1	600 cycles/hour
• no load		72 000 cycles/hour

Coil

Rated voltage	DC	5...110 V standard version	110 V sensitive version
Must release voltage		≥ 0,1 U _n	
Operating range of supply voltage		see Table 1	
Rated power consumption	DC	0,6 W 5...60 V standard version	0,6 W 110 V sensitive version 0,9 W 110 V standard version

Insulation

Insulation category	C250
Insulation rated voltage	400 V AC
Dielectric strength:	
• coil-contact	4 000 V AC
• contact-contact	1 000 V AC
Contact-coil distance	
• clearance	≥ 8 mm
• creepage	≥ 8 mm

General data

Operating time (typical value)	7 ms
Release time (typical value)	3 ms
Electrical life	
• resistive	> 10 ⁵ 16 A, 250 V AC
• lamp load	> 10 ⁵ 1000 W, 230 V AC (for 1NO AgSnO ₂)
• lamp load	> 3 x 10 ⁴ 3000 W, 230 V AC (for 1NO AgSnO ₂)
• halogen lamp load	> 10 ⁴ 2500 W, 230 V AC (for 1NO AgSnO ₂)
• cos φ	see Fig. 2
• L/R = 40 ms	> 10 ⁵ 0,12 A, 220 V DC
Mechanical life (cycles)	> 3 x 10 ⁷
Dimensions (L x W x H)	29,5 x 13,1 x 25,5 mm
Weight	18 g
Ambient temperature	
• operating	-40...+85 °C
• storing	-40...+70 °C
Cover protection category	IP 40 or IP 67
Shock resistance	20 g
Vibration resistance	10 g 10...150 Hz
Solder bath temperature	max. 270 °C
Soldering time	max. 5 s

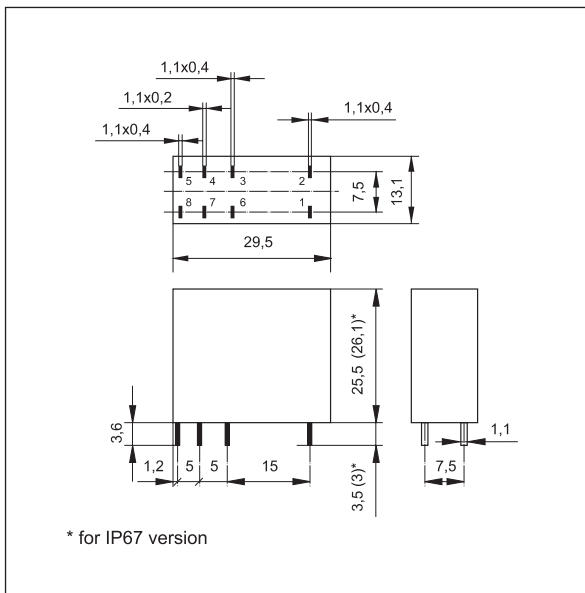


Coil data

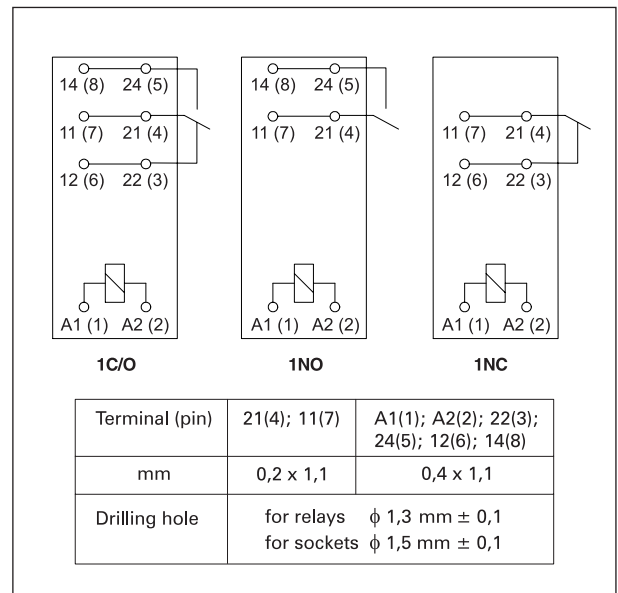
Table 1

Coil code	Rated voltage V DC	Coil resistance (± 10%) at 20 °C Ω	Coil operating range at 20 °C V DC	
			min.	max.
1005	5	49	3,5	8,9
1006	6	68	4,2	10,6
1009	9	110	6,3	15,9
1012	12	260	8,4	21,2
1018	18	550	12,6	31,8
1024	24	1 100	16,8	42,5
1036	36	2 100	25,2	63,7
1048	48	4 400	33,6	85,0
1060	60	7 000	42,0	106,2
1110	110	13 000	77,0	140,0
S110	110	20 500	77,0	188,0

Dimensions

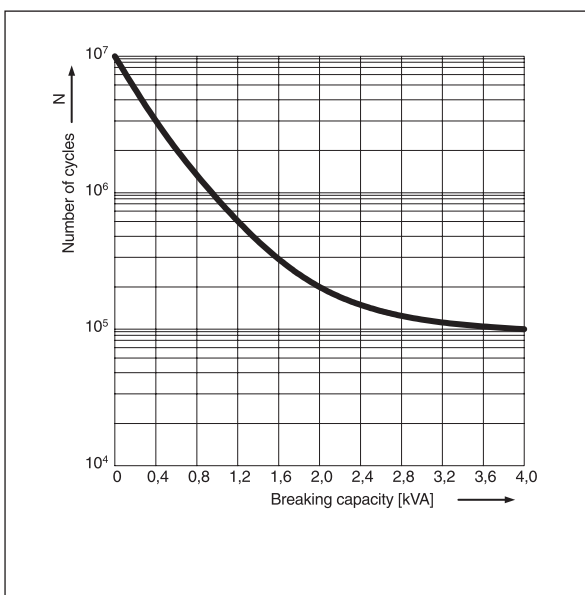


Connections diagram (pin side view)



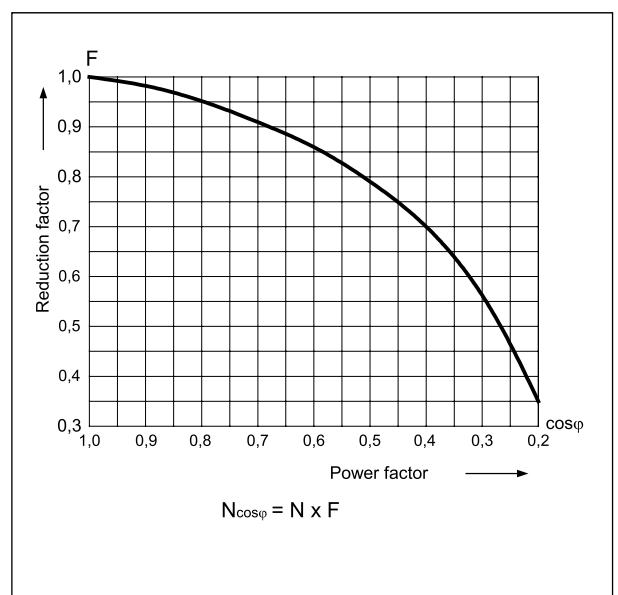
Electrical life at AC resistive load

Fig. 1



Electrical life reduction factor at AC inductive load

Fig. 2



Mounting

See Tables, pages 132, 133.

Ordering codes

