



- General purpose relays
- Sensitive coil available
- Protection category IP 40 or IP 67
- for PCB mounting

## Contacts

Contact number & arrangement		1C/O, 1NO, 1NC
Contact material		<b>AgCdO</b> , AgCdO/Au 3 μm, AgCu/Au 0,2 μm
Max. switching voltage	AC/DC	400 V / 250 V
Min. switching voltage		10 V AgCdO, 5 V AgCdO/Au 3 μm, 10 V AgCu/Au 0,2 μm
Rated load	AC1	8 A / 250 V AC
	DC1	8 A / 24 V DC
Min. switching current		5 mA AgCdO, 2 mA AgCdO/Au 3 μm, 5 mA AgCu/Au 0,2 μm
Rated current		8 A
Max. breaking capacity	AC1	2 000 VA
Min. breaking capacity		0,5 W AgCdO, 0,05 W AgCdO/Au 3 μm, 0,5 W AgCu/Au 0,2 μm
Resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load	AC1	600 cycles/hour
• no load		72 000 cycles/hour

## Coil

Rated voltage	DC	6...80 V standard version	5...60 V sensitive version
Must release voltage		DC: ≥ 0,1 U <sub>n</sub>	
Operating range of supply voltage		see Table 1, 2	
Rated power consumption	DC	0,8 W standard version	0,5 W sensitive 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)		2 ms
Electrical life		
• resistive AC1		> 2 x 10 <sup>5</sup> 8 A, 250 V AC
• cos φ		see Fig. 2
Mechanical life (cycles)		> 3 x 10 <sup>7</sup>
Dimensions (L x W x H)		28 x 12,5 x 26 mm for IP 67 H=26,5 mm
Weight		17 g
Ambient temperature		
• storing		-40...+85 °C
• operating		-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

Standard contact material marked with bolt type.



Coil data - DC standard version

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.
1006	6	58	4,0	9,4
1012	12	170	7,4	16,2
<b>1024</b>	<b>24</b>	<b>740</b>	<b>15,4</b>	<b>33,6</b>
1036	36	1 600	23,5	50,0
1048	48	3 200	31,0	70,0
1060	60	5 000	38,0	87,0
1080	80	10 000	55,0	125,0

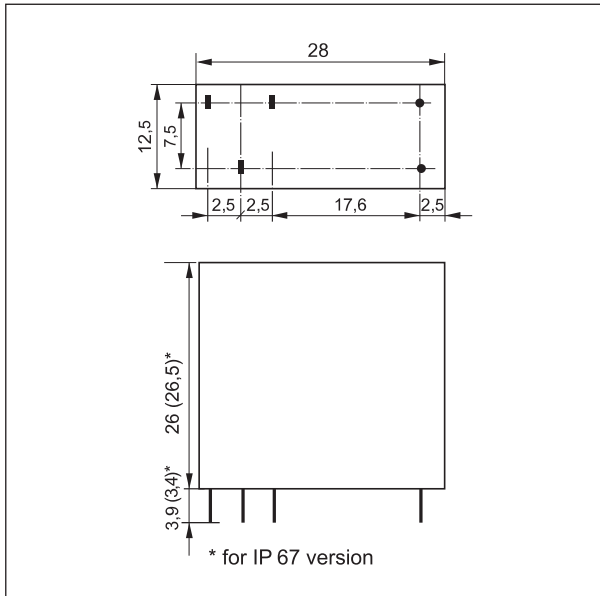
Standard coil rated voltages marked with bold type.

Coil data - sensitive version

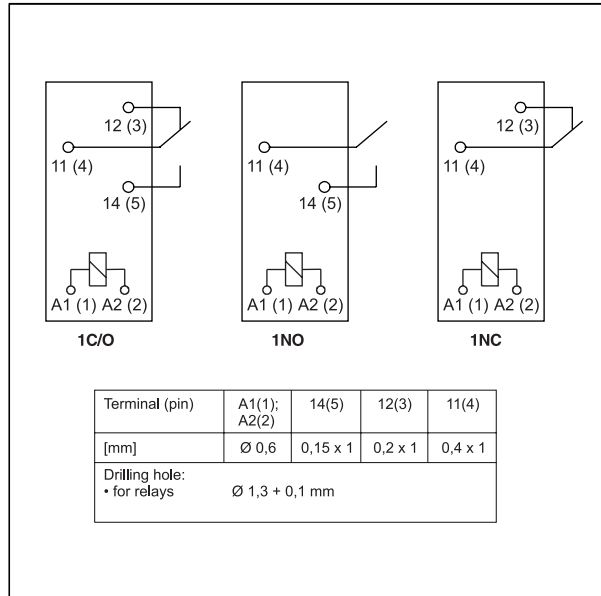
Table 2

Coil code	Rated voltage V DC	Coil resistance ±10% at 20 °C Ω	Coil operating range at 20 °C V DC	
			min.	max.
S005	5	47	3,2	8,5
S006	6	80	4,2	11,0
S012	12	330	8,3	22,5
S024	24	1 200	16,8	43,0
S036	36	2 700	25,0	64,0
S048	48	4 700	32,8	85,0
S060	60	7 200	42,0	105,0

Dimensions

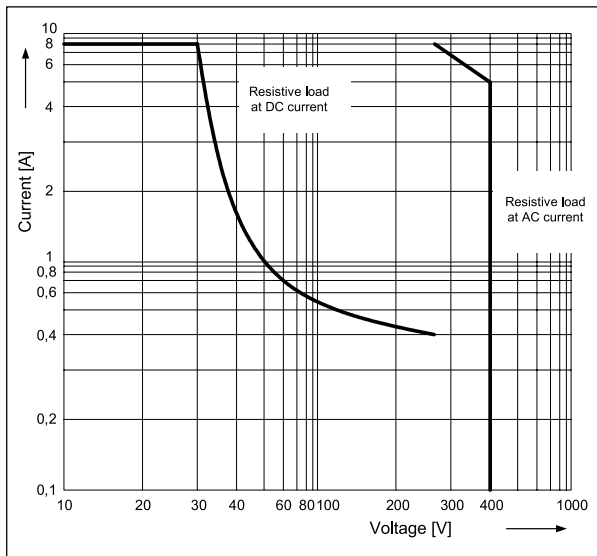


Connections diagram (pin side view)



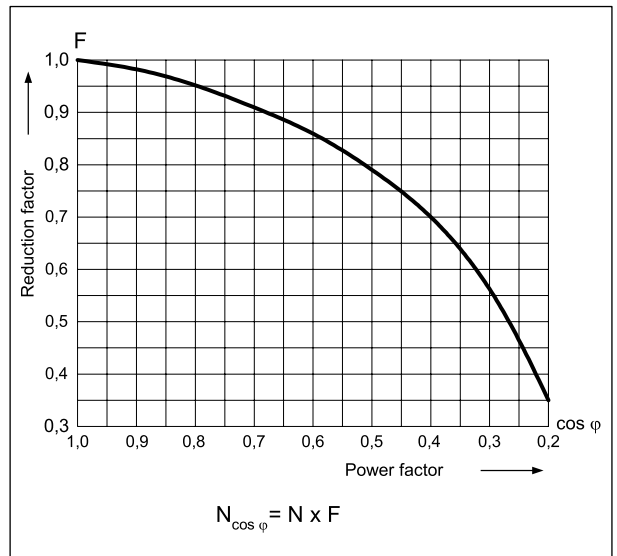
Max. AC and DC resistive load breaking capacity

Fig. 1



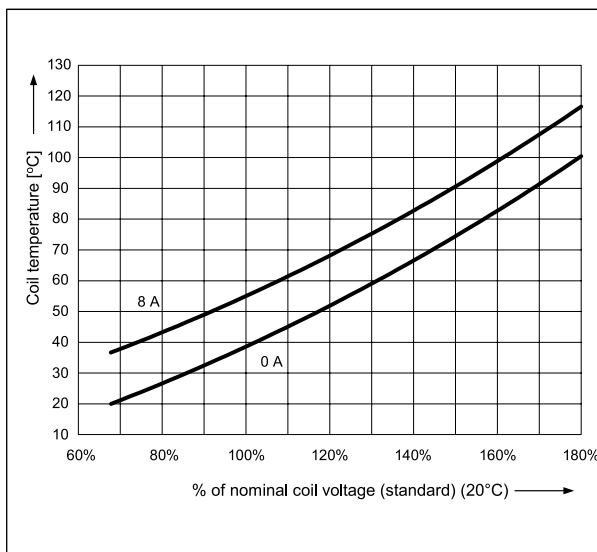
Electrical life reduction factor at AC inductive load

Fig. 2



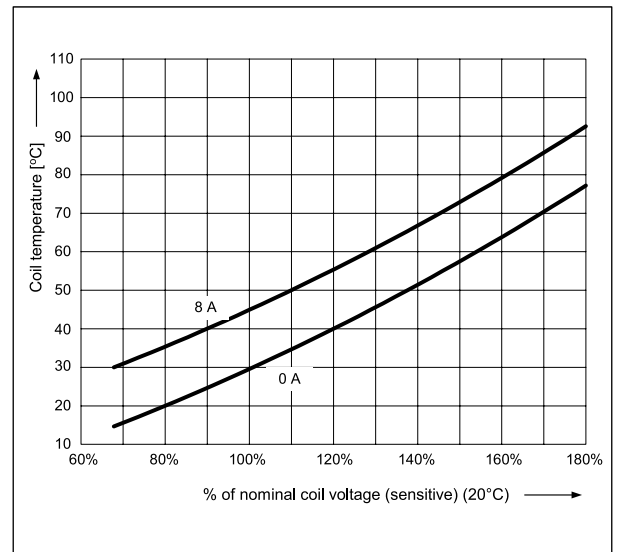
Coil temperature rise - standard version

Fig. 3



Coil temperature rise - sensitive version

Fig. 4



**Mounting**

Relays **RM93** are mounted only on PCBs.

**Ordering codes**

