



- Cadmium - free contacts
- 16 mm profile
- 5000 V /10 mm reinforced insulation
- PCB and plug-in mounting
- Wide range of accessories
- Coil AC and DC
- Recyclable packing

Contacts

Contact number & arrangement		1C/O, 1NO
Contact material		AgNi , AgSnO ₂
Max. switching voltage	AC/DC	400 V / 300 V
Min. switching voltage		5 V AgNi, 10 V AgSnO ₂
Rated load	AC1	16 A / 250 V AC
	DC1	16 A / 24 V DC
Min. switching current		5 mA AgNi, 10 mA AgSnO ₂
Max. inrush current		30 A for 1NO, AgSnO ₂
Rated current		16 A
Max. breaking capacity	AC1	4 000 VA
Min. breaking capacity		0,3 W AgNi, 1 W AgSnO ₂
Resistance		≤ 100 mΩ
Max. operating frequency	AC1	• at rated load
		• no load
		600 cycles/hour
		72 000 cycles/hour

Coil

Rated voltage	50/60 Hz AC	24...240 V
	DC	3...110 V
Must release voltage		≥ 0,1 U _n
Operating range of supply voltage		see Table 1, 2 and Fig. 4
Rated power consumption	AC	0,75 VA
	DC	0,4...0,48 W

Insulation

Insulation category		C250
Insulation rated voltage		400 V AC
Dielectric strength:	• coil-contact	5 000 V AC
	• contact-contact	1 000 V AC
Contact-coil distance	• clearance	≥ 10 mm
	• creepage	≥ 10 mm

General data

Operating time (typical value)		7 ms
Release time (typical value)		3 ms
Electrical life	• resistive	> 0,7 x 10 ⁵ 16 A, 250 V AC
	• 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 x 12,7 x 15,7 mm
Weight		14 g
Ambient temperature	• operating	-40...+85 °C
	• storing	-40...+85 °C
Cover protection category		IP 40 or IP 67
Shock resistance		30 g
Vibration resistance (NC/NO)		10 g 10...150 Hz
Solder bath temperature		max. 270 °C
Soldering time		max. 5 s

Coil data - DC version

Table 1

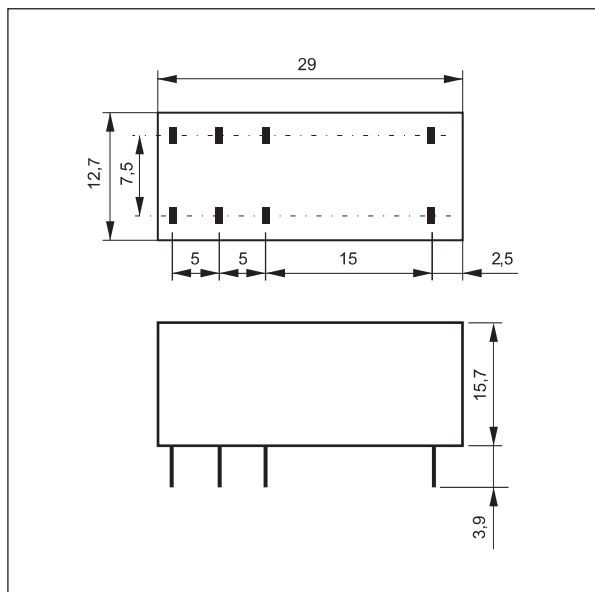
Coil code	Rated voltage V DC	Coil resistance (±10%) at 20 °C Ω	Coil operating range at 20 °C V DC	
			min.	max.
1003	3	22	2,1	7,6
1005	5	60	3,5	12,7
1006	6	90	4,2	15,3
1009	9	200	6,3	22,9
1012	12	360	8,4	30,6
1018	18	710	12,6	45,9
1024	24	1 440	16,8	61,2
1036	36	3 140	25,2	91,8
1048	48	5 700	33,6	122,4
1060	60	7 500	42,0	153,0
1110	110	25 200	77,0	280,0

Coil data - AC 50/60 Hz version

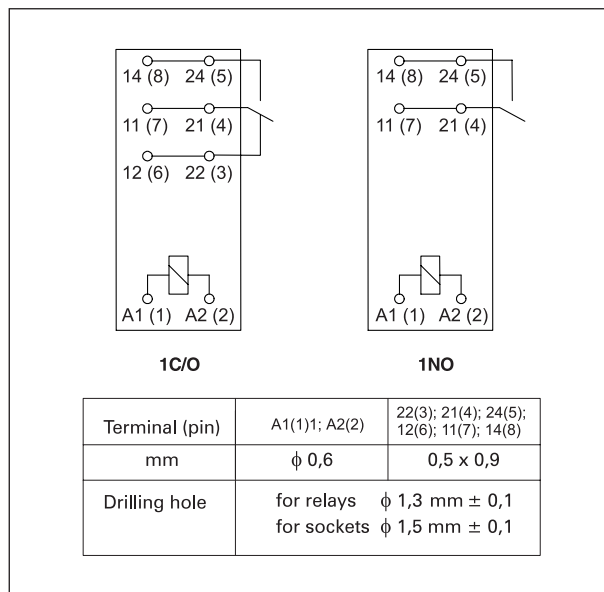
Table 2

Coil code	Rated voltage V AC	Coil resistance (±10%) at 20 °C Ω	Tolerance of resistance	Coil operating range at 20 °C V AC	
				min.	max.
5024	24	400	± 10%	19,2	28,8
5048	48	1550	± 10%	38,4	57,6
5060	60	2600	± 10%	48,0	72,0
5110	110	8900	± 10%	88,0	132,0
5115	115	9600	± 10%	92,0	138,0
5120	120	10200	± 10%	96,0	144,0
5220	220	35500	± 10%	176,0	264,0
5230	230	38500	± 10%	184,0	276,0
5240	240	42500	± 15%	192,0	288,0

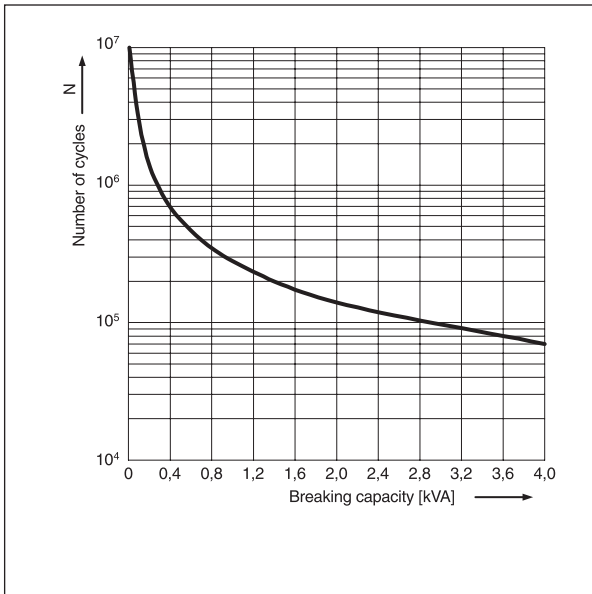
Dimensions



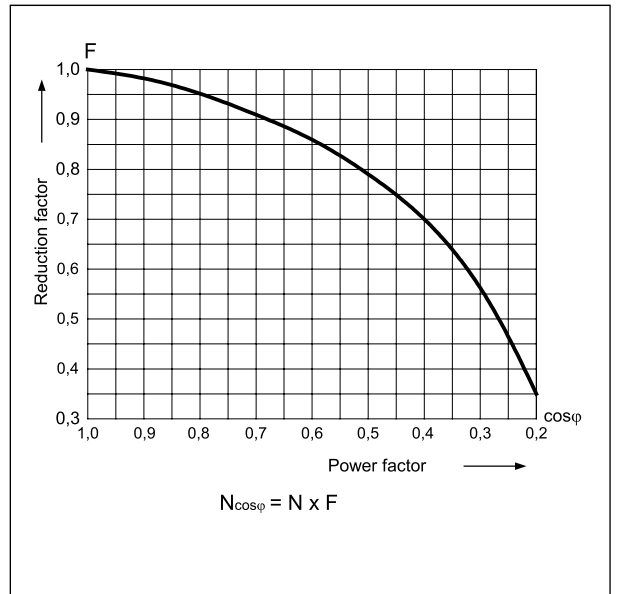
Connections diagrams (pin side view)



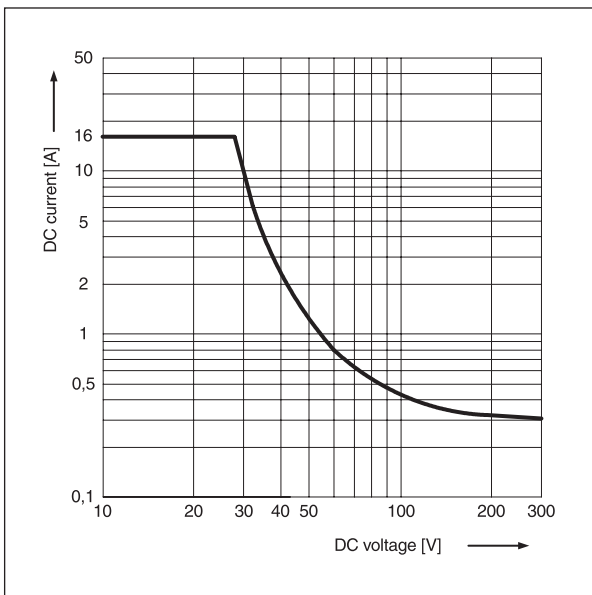
Electrical life at AC resistive load Fig. 1



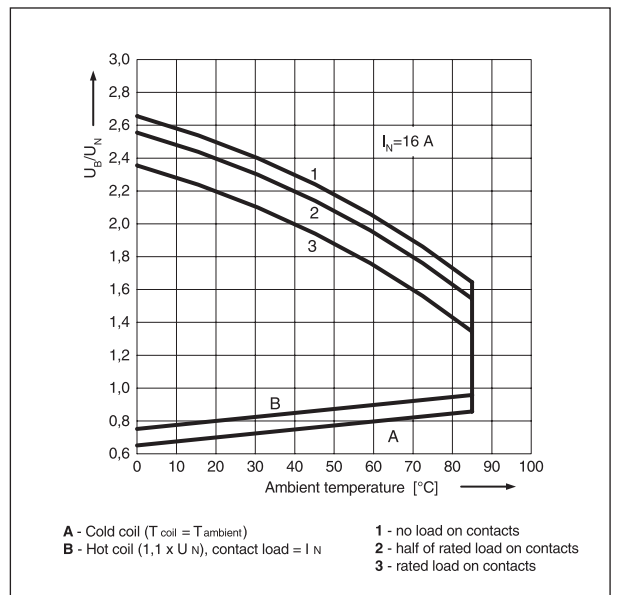
Electrical life reduction factor at AC inductive load Fig. 2



Max. DC resistive load breaking capacity Fig. 3



Coil operating range Fig. 4



Mounting

See Tables, pages 132, 133.

Ordering codes

