




- Small dimensions
- Switching current up to 10 A / 15 A
- The plastics applied provide for the operation of the relays at high temperature and in chemical environment
- Sealed, for soldering
- Applications: for household equipment, office machines, audio equipment, coffee machines, control devices, etc.
- Recognitions, certifications, directives: RoHS, 

Contact data

Number and type of contacts		1 C/O, 1 NO
Contact material		AgSnO₂
Max. switching voltage	AC/DC	277 V / 110 V
Min. switching voltage		5 V
Rated load	AC1	10 A / 240 V AC
	DC1	15 A / 24 V DC
Min. switching current		15 mA
Rated current		12 A
Max. breaking capacity	AC1	1 800 VA
Min. breaking capacity		0,75 W
Contact resistance		≤ 100 mΩ

Coil data

Rated voltage	DC	3...48 V
Must release voltage		DC: ≥ 0,05 U _n
Operating range of supply voltage		see Table 1
Rated power consumption	DC	0,36...0,45 W

Insulation

Dielectric strength		
• between coil and contacts		1 000 V AC
• contact clearance		500 V AC
Contact - coil distance		
• clearance		≥ 1,9 mm
• creepage		≥ 1,9 mm

General data

Operating time (typical value)		10 ms
Release time (typical value)		5 ms
Electrical life		
• resistive AC1	1 200 cycles/hour	10 ⁵ 7 A, 250 V AC
• resistive DC1	1 200 cycles/hour	10 ⁵ 15 A, 24 V DC
Mechanical life	18 000 cycles/hour	> 10 ⁷
Dimensions (L x W x H)		19 x 15,4 x 15,5 mm
Weight		11 g
Ambient temperature	• operating	-30...+55 °C
Cover protection category		IP 64
Shock resistance		10 g
Vibration resistance		1,5 mm DA (constant amplitude) 10...55 Hz
Solder bath temperature		max. 235 °C
Soldering time		max. 3,5 s

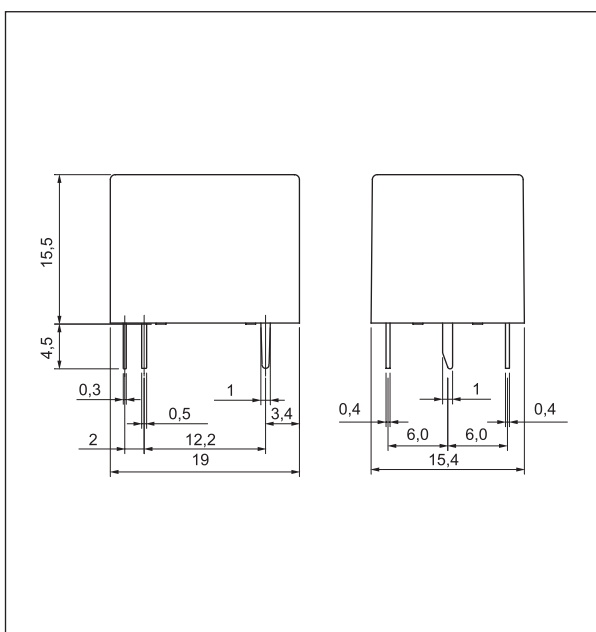
The data in bold type pertain to the standard versions of the relays.

Coil data - DC voltage version

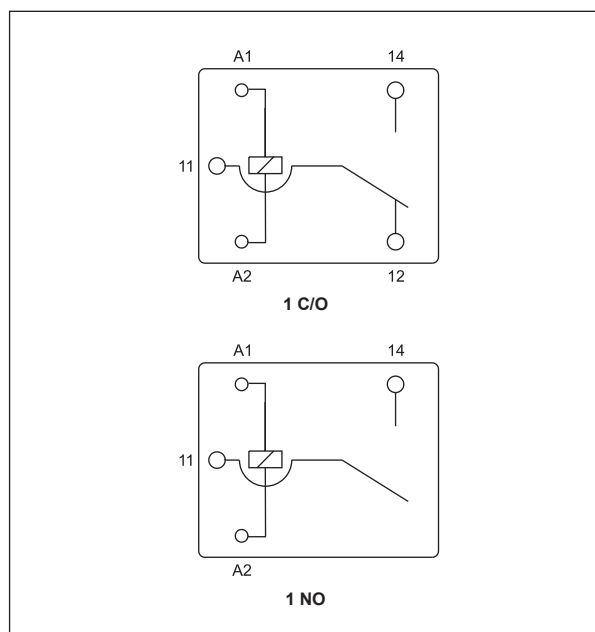
Table 1

Coil code	Rated voltage V DC	Coil resistance ± 10% at 20°C Ω	Coil operating range at 20°C V DC		Power consumption mW
			min.	max.	
1003	3	25	2,25	3,9	360
1005	5	70	3,75	6,5	360
1006	6	100	4,50	7,8	360
1009	9	225	6,75	11,7	360
1012	12	400	9,00	15,6	360
1018	18	900	13,50	23,4	360
1024	24	1 600	18,00	31,2	360
1048	48	6 400	38,40	62,4	450

Dimensions

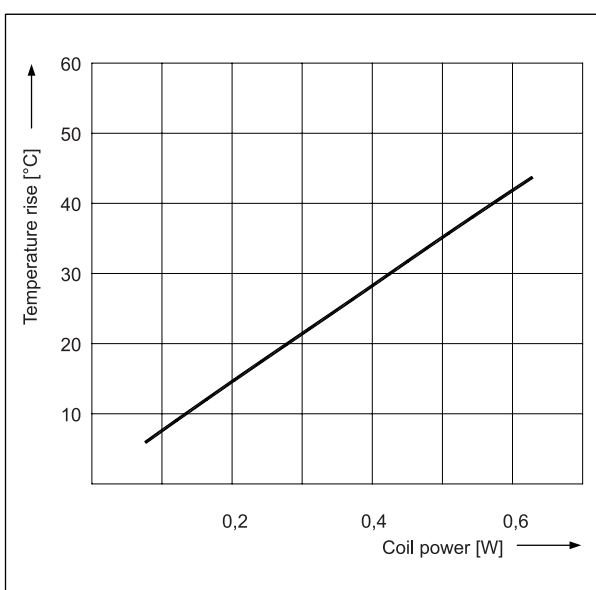


Connections diagrams (pin side view)



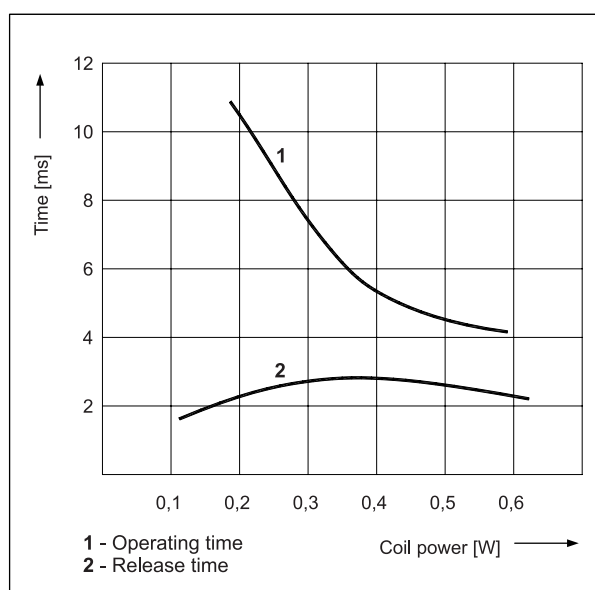
Coil temperature rise

Fig. 1



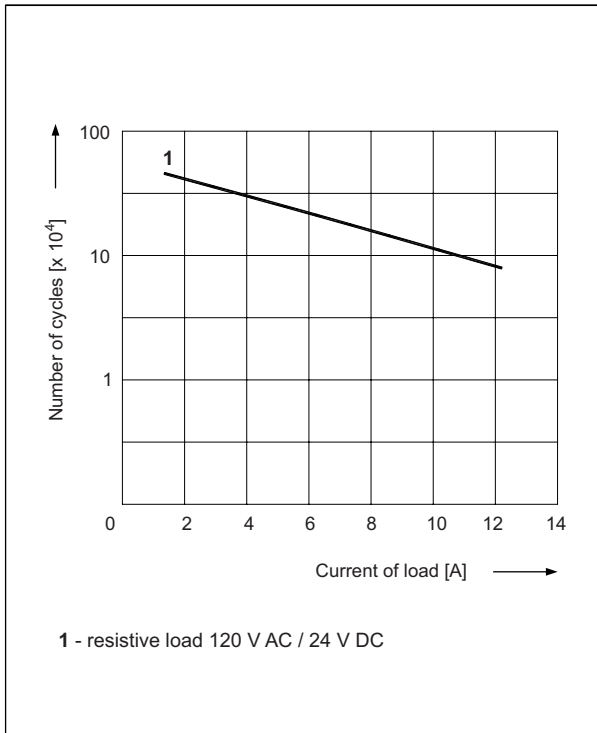
Operating time

Fig. 2

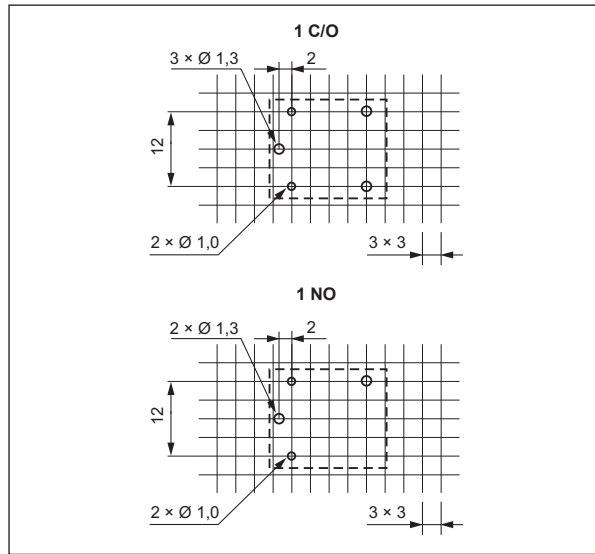


Electrical life

Fig. 3



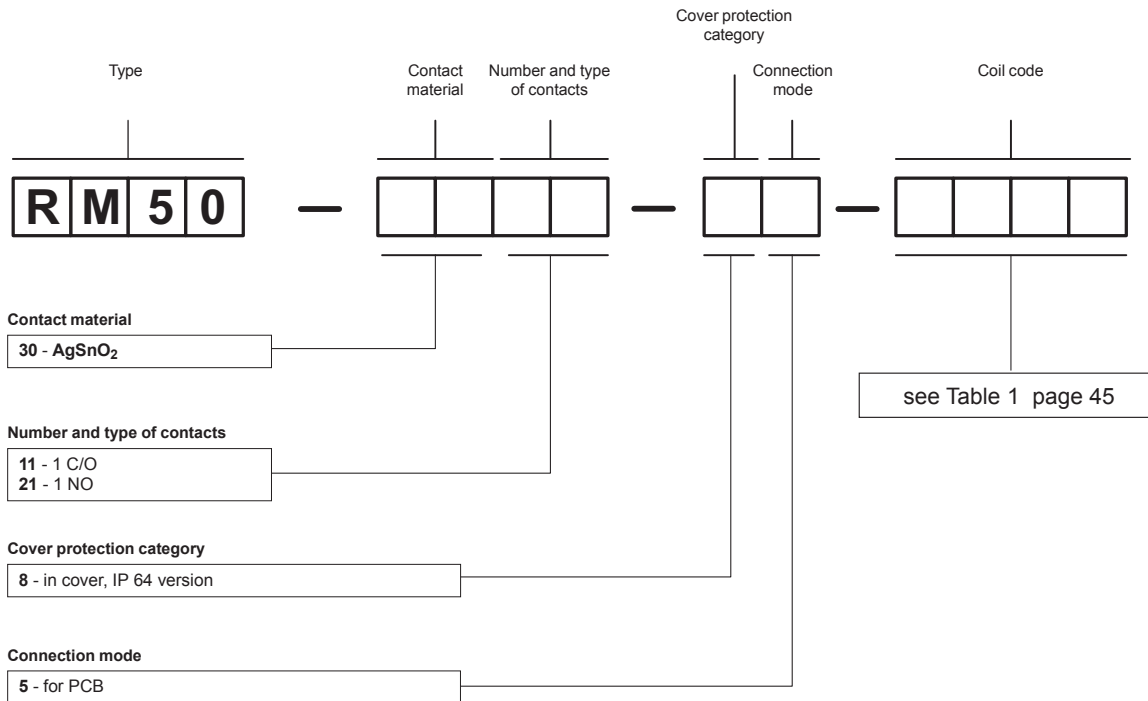
Mounting openings raster (solder side view)



Mounting

Relays **RM50** are designed for direct PCB mounting.

Ordering codes



Example of ordering code:

RM50-3011-85-1012

relay **RM50**, contact material AgSnO₂, with one changeover contact, in cover IP 64, for PCB, voltage version 12 V DC