


# RM50



- 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		<b>AgSnO<sub>2</sub></b>
Rated / max. switching voltage	AC	240 V / 277 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 <sub>n</sub>
Operating range of supply voltage		see Table 1
Rated power consumption	DC	0,36...0,45 W

## Insulation according to PN-EN 60664-1

Dielectric strength		1 000 V AC type of insulation: basic
• between coil and contacts		
• contact clearance		500 V AC type of clearance: micro-disconnection
Contact - coil distance		
• clearance		≥ 1,9 mm
• creepage		≥ 1,9 mm

## General data

Operating / release time (typical values)		10 ms / 5 ms
Electrical life		
• resistive AC1	1 200 cycles/hour	10 <sup>5</sup> 7 A, 250 V AC
• resistive DC1	1 200 cycles/hour	10 <sup>5</sup> 15 A, 24 V DC
Mechanical life	18 000 cycles/hour	> 10 <sup>7</sup>
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 PN-EN 60529
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.

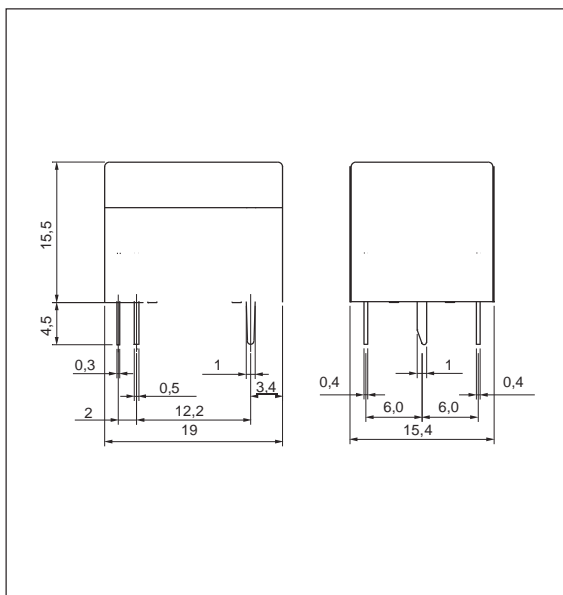
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Coil data - DC voltage version

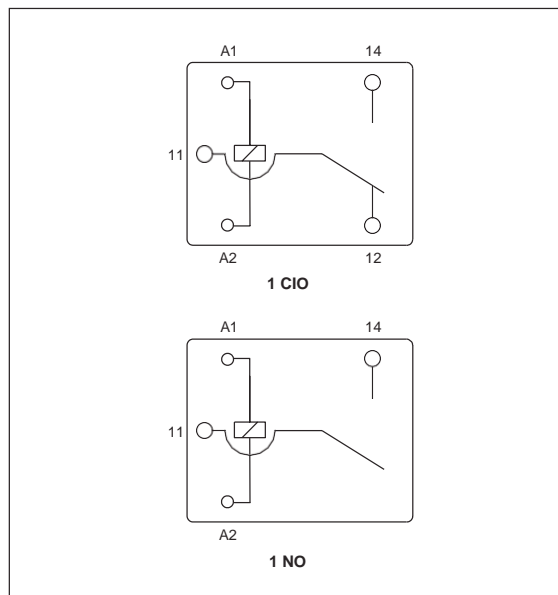
Table 1

Coil code	Rated voltage V DC	Coil resistance ± 10% at 20°C fi	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

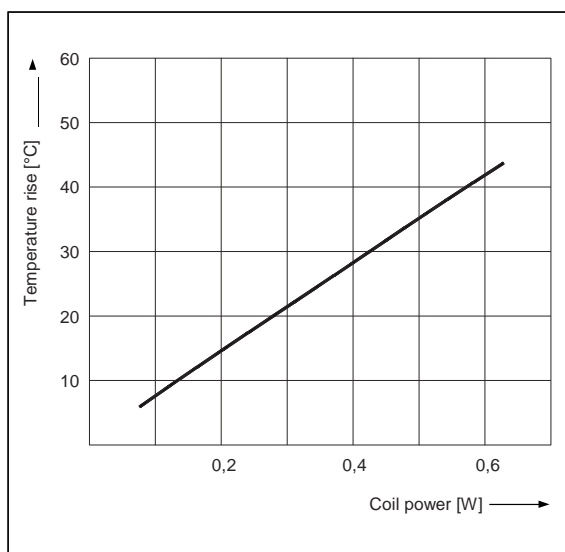


## Connection diagrams (pin side view)



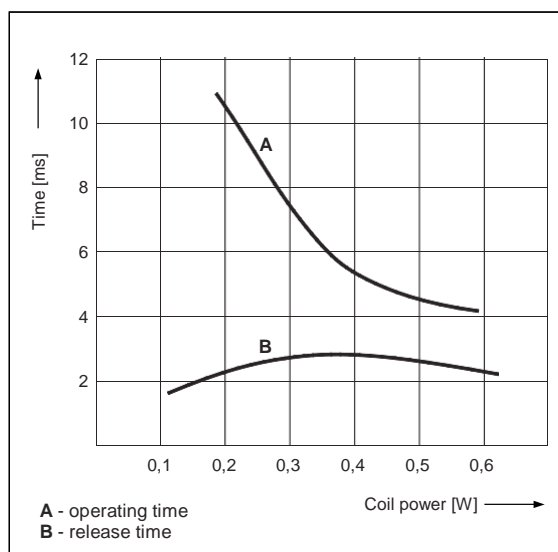
## Coil temperature rise

Fig. 1



## Operating / release time

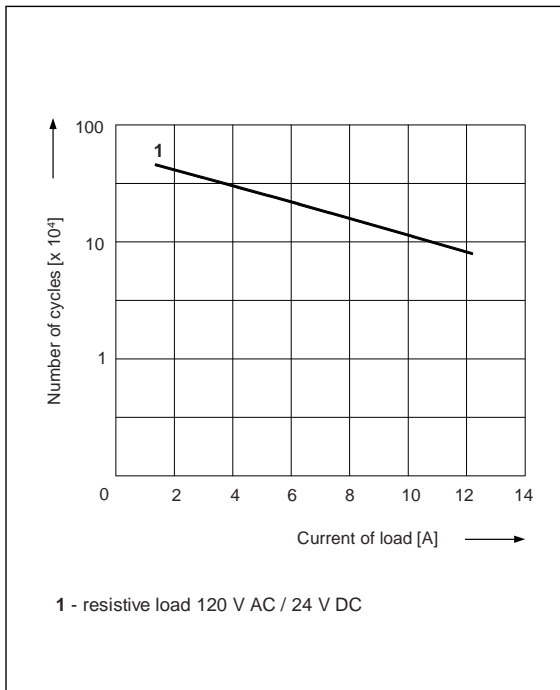
Fig. 2



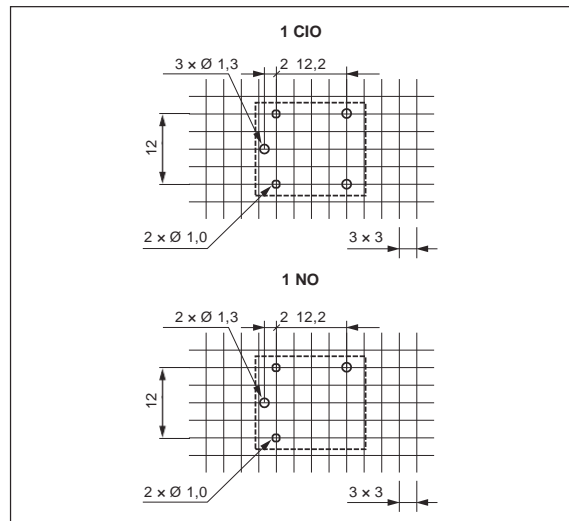
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## Electrical life

Fig. 3



## Pinout (solder side view)



## Mounting

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

## Ordering codes

