



- Very small dimensions
- High switching capacity up to 5 A or 8 A
- Cover with enhanced sealing protects the relay in course of soldering and cleaning
- Applications: for household equipment, office machines, control devices, alarm systems, in industrial control, industrial controllers
- Recognitions, certifications, directives: RoHS,  

Contact data

Number and type of contacts		1 C/O	1 NO
Contact material		1 C/O: AgNi , AgNi/Au 3 µm	1 NO: AgSnO₂
Rated / max. switching voltage	AC	1 C/O: 250 V / 380 V	1 NO: 250 V / 440 V
Min. switching voltage		5 V AgNi, 1 V AgNi/Au 3 µm	5 V AgSnO ₂
Rated load	AC1 DC1	1 C/O: 5 A / 250 V AC 1 C/O: 5 A / 30 V DC	1 NO: 8 A / 250 V AC 1 NO: 8 A / 30 V DC
Min. switching current		10 mA AgNi, 1 mA AgNi/Au 3 µm	10 mA AgSnO ₂
Rated current		1 C/O: 5 A	1 NO: 8 A
Max. breaking capacity	AC1	1 C/O: 1 250 VA	1 NO: 2 000 VA
Min. breaking capacity		50 mW AgNi, 1 mW AgNi/Au 3 µm	50 mW AgSnO ₂
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	0,20 W

Insulation according to PN-EN 60664-1

Dielectric strength		
• between coil and contacts	4 000 V AC	type of insulation: reinforced
• contact clearance	1 000 V AC	type of clearance: micro-disconnection
Contact - coil distance		
• clearance	≥ 5 mm	
• creepage	≥ 5 mm	

General data

Operating / release time (typical values)		8 ms / 4 ms
Electrical life		
• resistive AC1	360 cycles/hour	> 10 ⁵ 1 C/O: 5 A, 250 V AC 1 NO: 8 A, 250 V AC
• resistive DC1	1 800 cycles/hour	> 10 ⁵ 1 C/O: 5 A, 30 V DC 1 NO: 8 A, 30 V DC
Mechanical life	18 000 cycles/hour	> 10 ⁷
Dimensions (L x W x H)		20 x 10 x 10,5 mm
Weight		6 g
Ambient temperature	• operating	-40...+85 °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

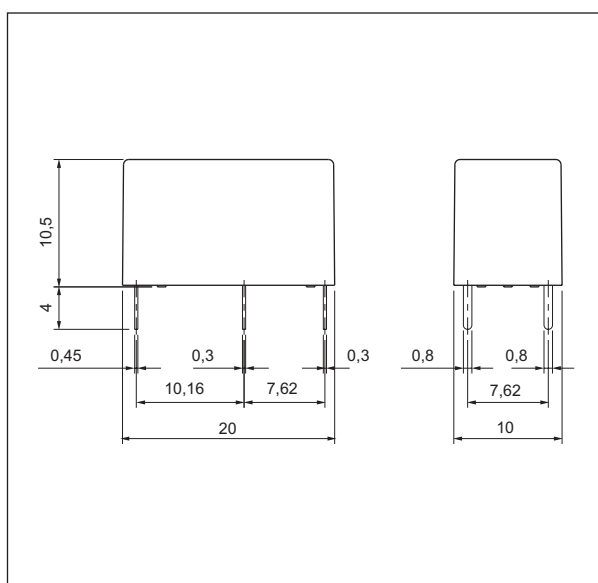
The data in bold type pertain to the standard versions of the relays.

Coil data - DC voltage version

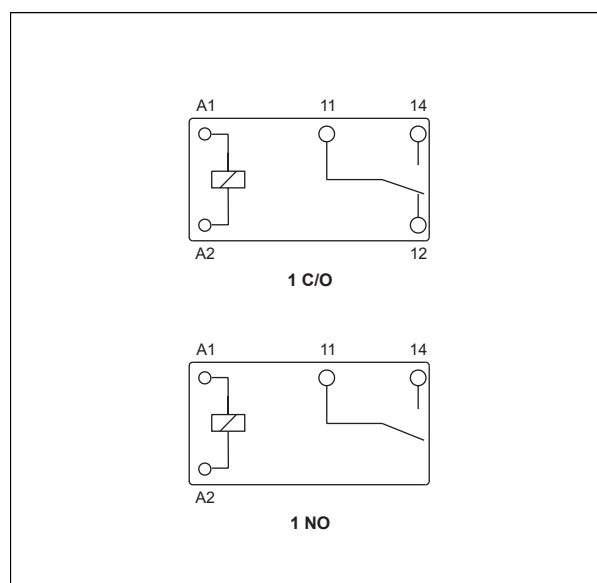
Table 1

Coil code	Rated voltage V DC	Coil resistance $\pm 10\%$ at 20°C Ω	Coil operating range at 20°C V DC		Power consumption mW
			min.	max.	
1003	3	45	2,25	4,5	200
1005	5	125	3,75	7,5	200
1006	6	180	4,50	9,0	200
1009	9	405	6,75	13,5	200
1012	12	720	9,00	18,0	200
1024	24	2 880	18,00	36,0	200
1048	48	11 520	36,00	72,0	200

Dimensions

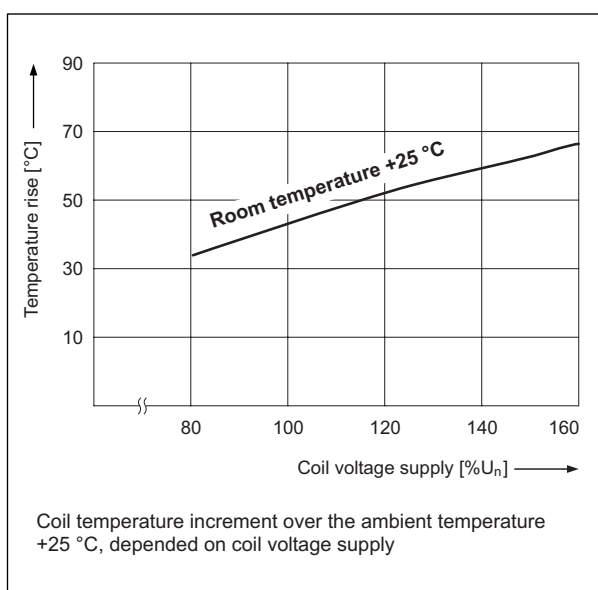


Connection diagrams (pin side view)



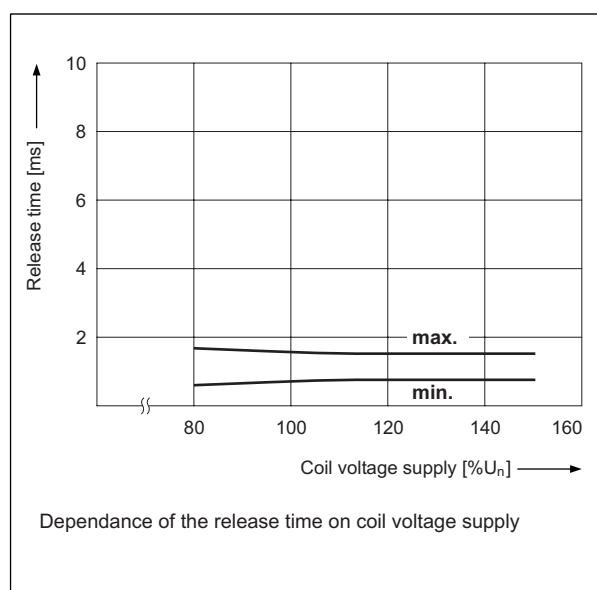
Coil temperature rise

Fig. 1

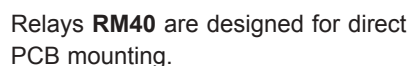


Release time

Fig. 2



Mounting



The diagram illustrates the structure of the RM40-1111-85 coil code. The code is divided into five segments, each with a specific meaning and a list of possible values:

- Type:** RM40
- Contact material:** 11 - 1 C/O, 21 - 1 NO
- Number and type of contacts:** 11 - 1 C/O, 21 - 1 NO
- Cover protection category:** 8 - in cover, IP 64 version
- Connection mode:** 5 - for PCB

The diagram also shows the physical layout of the code segments, with the first segment (RM40) being a single block, and the subsequent segments (11, 11, 8, 5) being individual digits or groups of digits.

Examples of ordering code:

RM40-2011-85-1003 relay **RM40**, contact material AgNi, with one changeover contact, in cover IP 64, for PCB, voltage version 3 V DC

RM40-3021-85-1024 relay **RM40**, contact material AgSnO₂, with one normally open contact, in cover IP 64, for PCB, voltage version 24 V DC