

RM18C

miniature relays



- Low power consumption by the coil.
- Micro-miniature relay, standard PCB terminals.
- zmiana tekstu – EX version – GLOW WIRE design suitable for use in systems using refrigerants such as R134
- Standard and sensitive coil
- Applications: Household appliances: air conditioners, heaters, etc.; vending machines; Office equipment: computers, fax machines, etc.; Electrically operated windows, car antennas, door locks, etc.
- Recognitions, certifications, directives: RoHS, 

Contact data

Number and type of contacts	1 NO
Contact material	AgSnO ₂
Rated / max. switching voltage	AC 277 V AC/ 277 V AC
Min. switching voltage	6 V DC
Rated load (capacity)	AC1 16 A / 277 V AC
Motor load	1/3 Hp, 277 V AC, 1 × 10 ⁵ cycles, 105 °C
Min. switching current	6 V DC / 1 A
Max. make current	16 A
Rated current	16 A
Max. breaking capacity	AC1 4432 VA
Min. breaking capacity	6 VA
Contact resistance	≤ 100 mΩ (1A 24 V DC)
Max. operating frequency:	• at rated load AC1 360 cycles/hour • no load 18 000 cycles/hour

Coil data

Rated voltage	DC 5, 6, 9, 12, 24
Operating range of supply voltage	see table 1, 2
Rated power consumption	0,45 W (standard coil)/ 0,2 W (sensitive coil) – see table 1,2

Insulation according to EN 60664-1

Insulation resistance	1000 MΩ Min (500 V DC)
Rated surge voltage	10 kV 1,2 / 50 μs
Overvoltage category	II
Insulation pollution degree	2
Flammability class	UL 94 V-0
Dielectric strength	• between coil and contacts 4 000 V AC • between open contacts 1 000 V AC (0.4 W), 750 V AC (0.2 W)
Contact - coil distance	• clearance ≥ 8 mm • creepage ≥ 8 mm

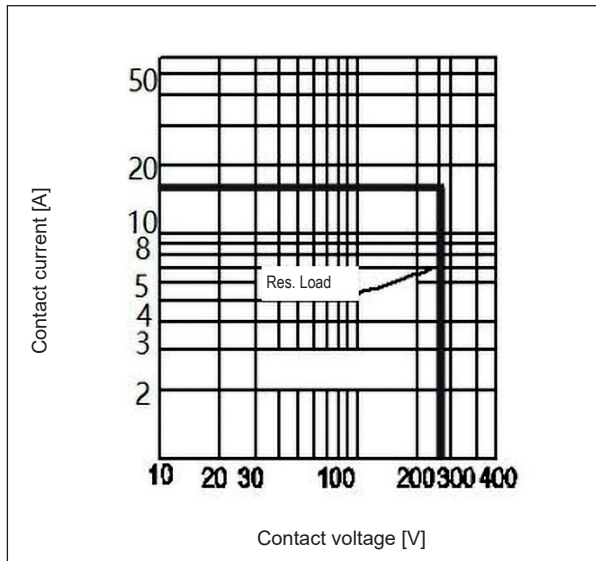
General data

Max. Operate/release time (typical values)	10 ms / 5 ms
Electrical life	• resistive AC1 (number of cycles) ≥ 5 × 10⁴ cycles
Mechanical life (cycles)	≥ 10 ⁷ Cycles
Dimensions (L × W × H) / Weight	18.2 × 10.2 × 15.5 / 5.7g
Ambient temperature (non-condensation and/or icing)	• storage -40... +85 °C • operating -40... +105 °C
Cover protection category	RT II / RT III
Environmental protection	RT II / RT III
Shock resistance	10G
Vibration resistance (NO)	10~55Hz, at double amplitude of 1.5 mm
Solder bath temperature / Soldering time	max. 270 °C / max. 5 s

05.08.2026

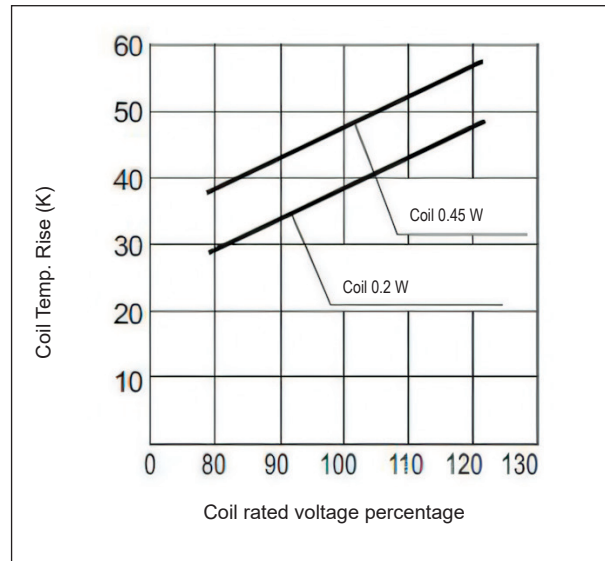
Max. Switching Power

Fig. 1



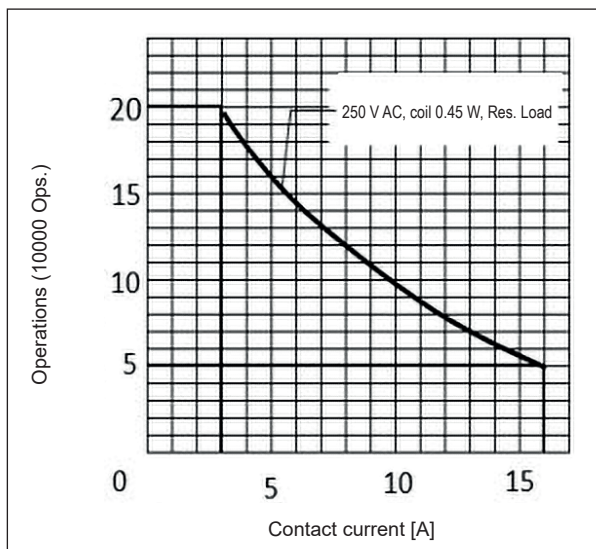
Coil Temp. Rise

Fig. 2



Endurance Curve

Fig. 3

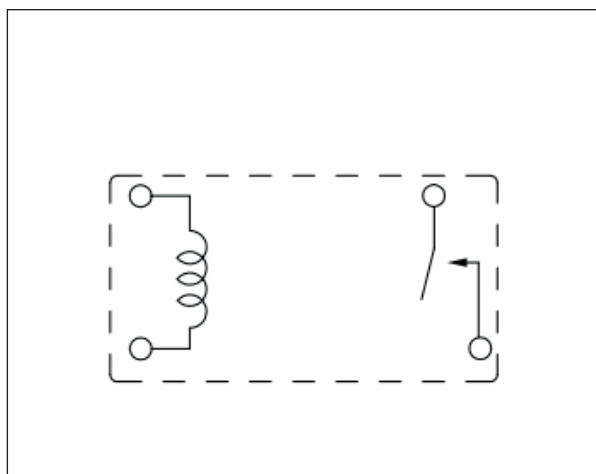


Note:

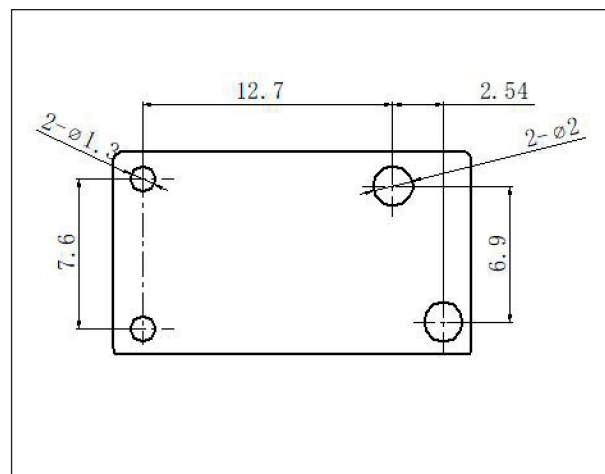
(1) Test conditions: room temperature, flux-proof product, resistive load, 1s on, 9s off.

(2) The above curves are for reference only, and the final result is subject to the experiment.

Connection diagrams (bottom)



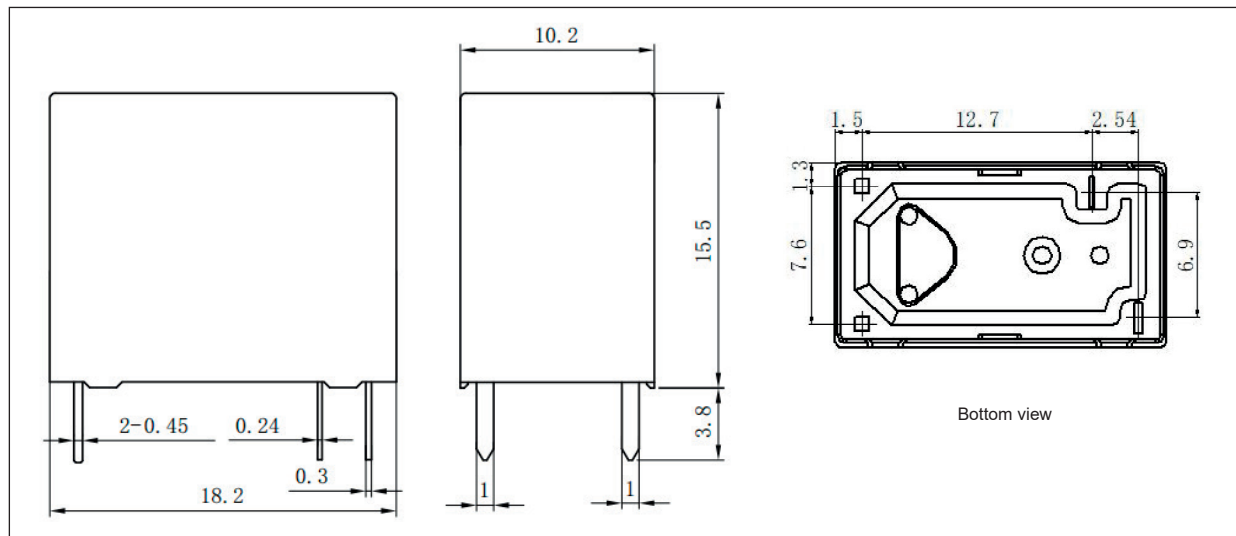
PCB Layouts (bottom view)



RM18C

miniature relays

Dimension



Note:

1. The dimension of pin is the size before tinning
2. Tolerance of PCB layout: ± 0.1 mm.

Coil data – DC voltage version, standard

Table 1

Coil code	Rated voltage V DC	Coil resistance at 20 °C Ω	Acceptable resistance	Coil operating range V DC	
				min. (at 20 °C)	max (20 °C)
1005	5	62,5	$\pm 10\%$	3,75	5,5
1006	6	90,0	$\pm 10\%$	4,5	6,6
1009	9	202,5	$\pm 10\%$	6,75	9,9
1012	12	360,0	$\pm 10\%$	9,0	13,2
1024	24	1440,0	$\pm 10\%$	18,0	26,4

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

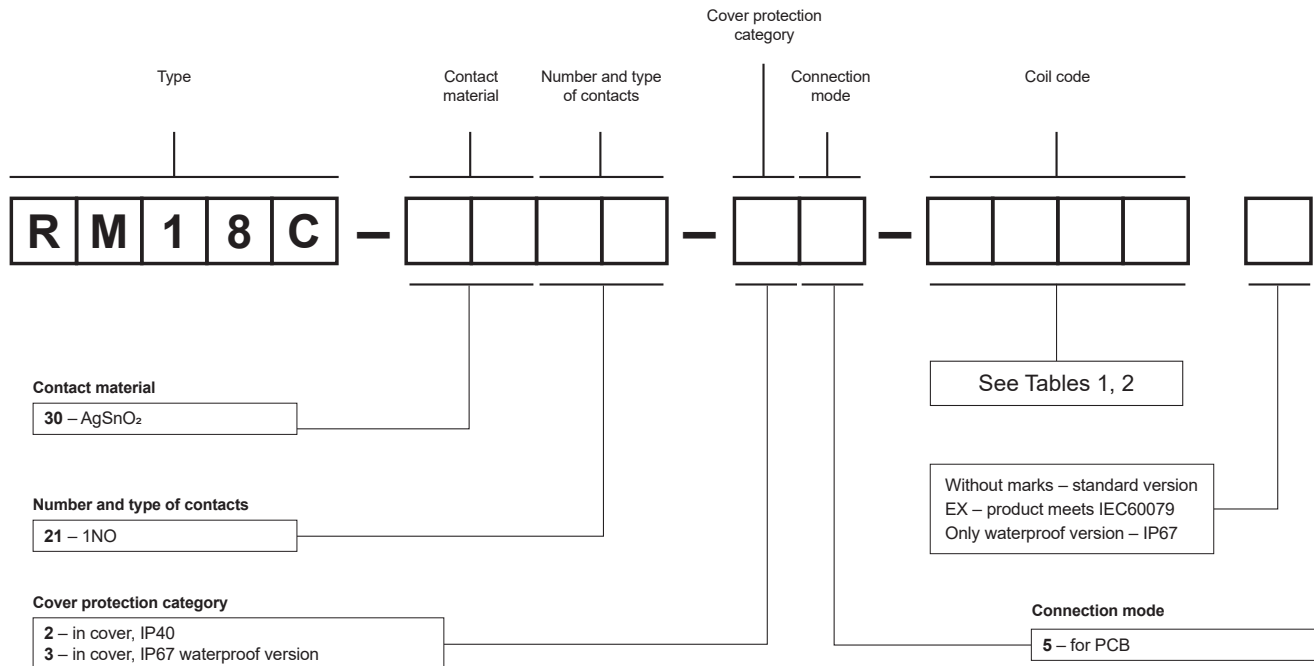
Coil data – DC voltage version, sensitive

Table 2

Coil code	Rated voltage V DC	Coil resistance at 20 °C Ω	Acceptable resistance	Coil operating range V DC	
				min. (at 20 °C)	max (20 °C)
S005	5	125	$\pm 10\%$	3,75	5,5
S006	6	180	$\pm 10\%$	4,5	6,6
S009	9	405	$\pm 10\%$	6,75	9,9
S012	12	720	$\pm 10\%$	9,0	13,2
S024	24	2880	$\pm 10\%$	18,0	26,4

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

Ordering codes



Examples of ordering code:

RM18C-3021-25-1012

relay **RM18C**, contact material AgSnO₂, one normally open contact, in cover, IP40 version, for PCB, standard coil voltage 12 V DC

RM18C-3021-35-1024-EX

relay **RM18C**, contact material AgSnO₂, one normally open contact, in cover, IP67 waterproof version, for PCB, standard coil voltage 24 V DC, EX version

RM18C-3021-35-S024

relay **RM18C**, contact material AgSnO₂, one normally open contact, in cover, IP67 waterproof version, for PCB, sensitive coil voltage 24 V DC,

PRECAUTIONS:

1. Ensure that the parameters of the product described in its specification provide a safety margin for the appropriate operation of the device or system and never use the product in circumstances which exceed the parameters of the product. 2. Never touch any live parts of the device. 3. Ensure that the product has been connected correctly. An incorrect connection may cause malfunction, excessive heating or risk of fire. 4. In case of any risk of any serious material loss or death or injuries of humans or animals, the devices or systems shall be designed so to equip them with double safety system to guarantee their reliable operation.