



RM32N

miniature relays



- DC coils - of up to 24 V DC, low coil power 0,20 W (sensitive version) or 0,45 W (standard version)
- For PCB • Very small dimensions, light weight
- High load up to 10 A / 125 V AC ❶
- Application: for household electrical appliance, automation systems, electrical equipment, instrument and meter, telecommunication devices, remote control facilities, light controllers, etc.
- Recognitions, certifications, directives: RoHS,  

Contact data

| | | | |
|--------------------------------|--------------------------|---|---|
| Number and type of contacts | 1 CO, 1 NO | | |
| Contact material | AgSnO₂ | | |
| Rated / max. switching voltage | AC | 250 V / 277 V | |
| Min. switching voltage | 5 V | | |
| Rated load | AC1 | 1 CO: 5 A / 5 A (NO/NC) / 250 V AC 1 CO: 10 A / 125 V AC ❶ | 1 NO: 5 A / 250 V AC 1 NO: 10 A / 125 V AC |
| | DC1 | 1 CO: 5 A / 5 A (NO/NC) / 28 V DC | 1 NO: 5 A / 28 V DC |
| Rated current | 5 A | | |
| Max. breaking capacity | AC1 | 1 250 VA | |
| | AC3 | 186 W | 0,25 HP UL 508 (single-phase motor) |
| Contact resistance | ≤ 100 mΩ | | |

Coil data

| | | |
|-----------------------------------|---------------------------|---|
| Rated voltage | DC | 5 ... 24 V |
| Must release voltage | DC: ≥ 0,05 U _n | |
| Operating range of supply voltage | see Tables 1, 2 | |
| Rated power consumption | DC | 0,20 W sensitive version ❶ 0,45 W standard version |

Insulation according to PN-EN 60664-1

| | | |
|-----------------------|-----------------------------|--|
| Insulation resistance | 100 MΩ | 500 V DC, 60 s |
| Dielectric strength | • between coil and contacts | 2 500 V AC type of insulation: basic |
| | • contact clearance | 1 000 V AC type of clearance: micro-disconnection |

General data

| | | | |
|---|--|-------------------|--|
| Operating / release time (typical values) | 8 ms / 5 ms | | |
| Electrical life (number of cycles) | • resistive AC1 | 1 800 cycles/hour | 10 ⁵ 1 CO: 5 A / 5 A (NO/NC), 250 V AC 1 NO: 5 A, 250 V AC |
| | • resistive DC1 | 1 800 cycles/hour | 10 ⁵ 1 CO: 5 A / 5 A (NO/NC), 28 V DC 1 NO: 5 A, 28 V DC |
| Mechanical life | 18 000 cycles/hour | 10 ⁷ | |
| Dimensions (L x W x H) | 18,8 x 10,6 x 15,3 mm | | |
| Weight | 6 g | | |
| Ambient temperature | • operating | -40...+70 °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 s | | |

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

❶ Only for contacts 1 NO

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Coil data - DC voltage version, sensitive

Table 1

| Coil code ❶ | Rated voltage V DC | Coil resistance at 20 °C Ω | Acceptable resistance | Coil operating range V DC | |
|-------------|-----------------------|----------------------------------|--------------------------|------------------------------|-----------------|
| | | | | min. (at 20 °C) | max. (at 20 °C) |
| S005 | 5 | 125 | ± 10% | 3,75 | 6,5 |
| S009 | 9 | 405 | ± 10% | 6,75 | 11,7 |
| S012 | 12 | 720 | ± 10% | 9,00 | 15,6 |
| S018 | 18 | 1 620 | ± 10% | 13,50 | 23,4 |
| S024 | 24 | 2 880 | ± 10% | 18,00 | 31,2 |

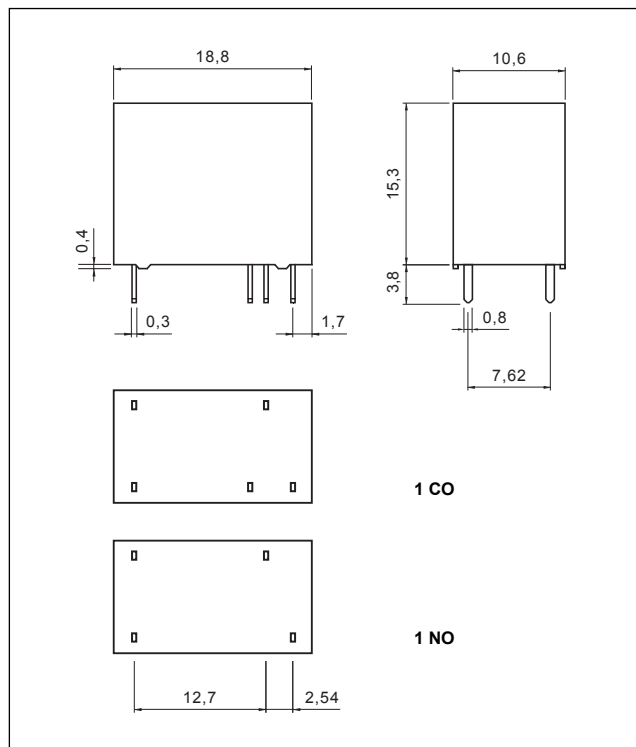
❶ Only for contacts 1 NO

Coil data - DC voltage version, standard

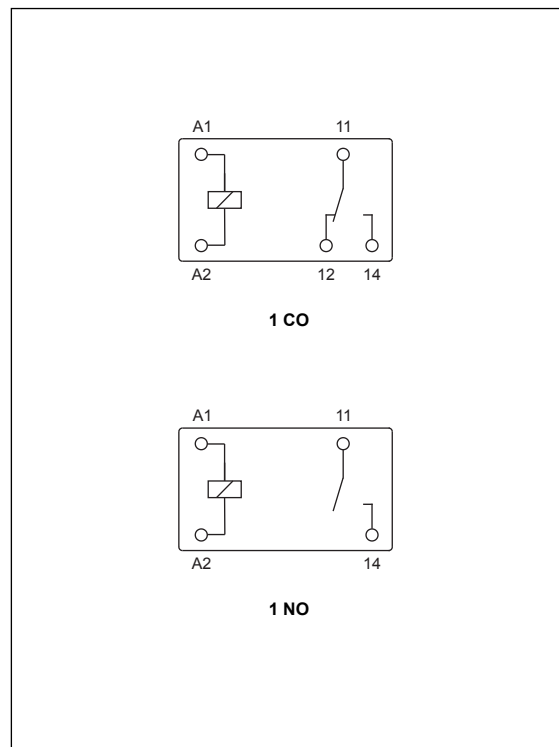
Table 2

| Coil code | Rated voltage V DC | Coil resistance at 20 °C Ω | Acceptable resistance | Coil operating range V DC | |
|-----------|-----------------------|----------------------------------|--------------------------|------------------------------|-----------------|
| | | | | min. (at 20 °C) | max. (at 20 °C) |
| 1005 | 5 | 56 | ± 10% | 3,75 | 6,5 |
| 1009 | 9 | 180 | ± 10% | 6,75 | 11,7 |
| 1012 | 12 | 320 | ± 10% | 9,00 | 15,6 |
| 1018 | 18 | 720 | ± 10% | 13,50 | 23,4 |
| 1024 | 24 | 1 280 | ± 10% | 18,00 | 31,2 |

Dimensions



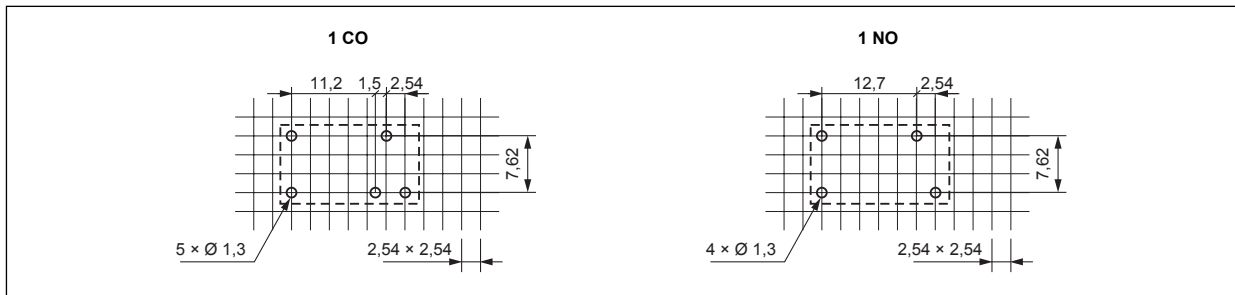
Connection diagrams (pin side view)



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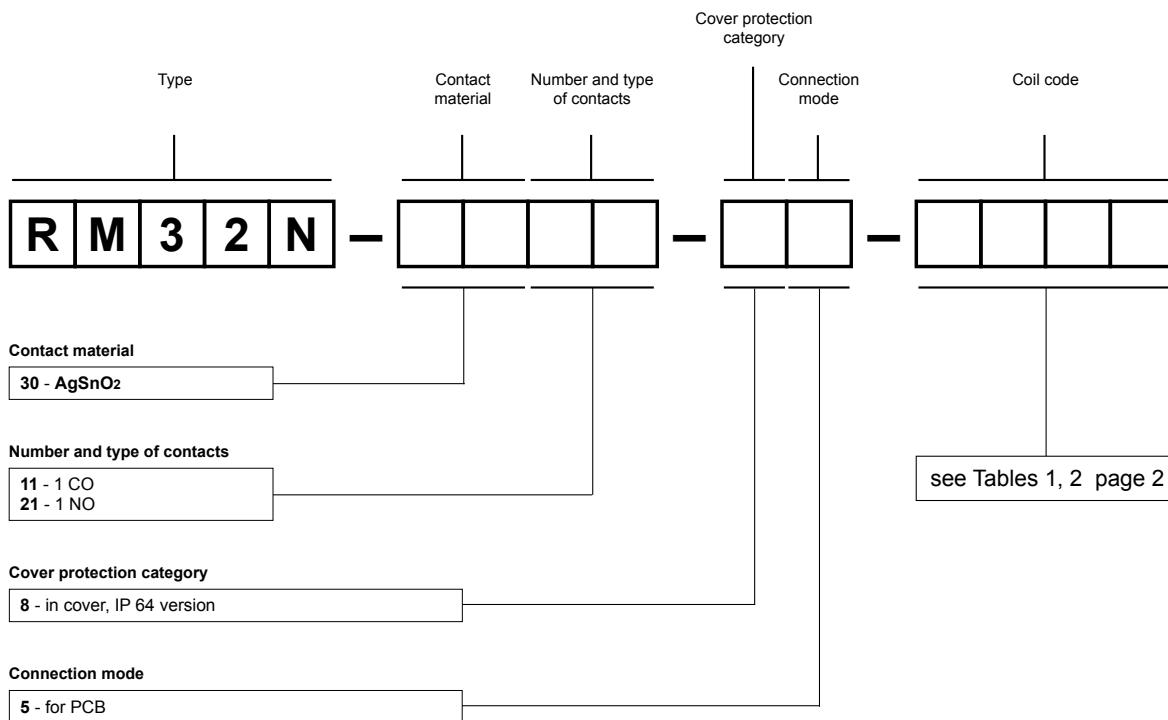
Pinout (solder side view)



Mounting

Relays **RM32N** are designed for direct PCB mounting.

Ordering codes



Examples of ordering codes:

- RM32N-3021-85-S018** relay **RM32N**, for PCB, one normally open contact, contact material AgSnO₂, sensitive coil voltage 18 V DC, in cover IP 64
- RM32N-3011-85-1024** relay **RM32N**, for PCB, one changeover contact, contact material AgSnO₂, standard coil voltage 24 V DC, in cover IP 64

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.