

# Product datasheet

Specifications



## Miniature plug-in relay, 10 A, 3 CO, 48 V DC

Local distributor code:  
389837541

RXM3AB1ED

EAN Code: 3389119403573

### Main

|                               |                                  |
|-------------------------------|----------------------------------|
| Range Of Product              | Harmony Electromechanical Relays |
| Series Name                   | Miniature                        |
| Product Or Component Type     | Plug-in relay                    |
| Device Short Name             | RXM                              |
| Contacts Type And Composition | 3 C/O                            |
| [Uc] Control Circuit Voltage  | 48 V DC                          |
| Status Led                    | Without                          |
| Control Type                  | Lockable test button             |
| Utilisation Coefficient       | 20 %                             |

### Complementary

|  |   |
|--|---|
| Shape Of Pin                           | Flat  |
| [Ui] Rated Insulation Voltage          | 250 V conforming to IEC<br>300 V conforming to CSA<br>300 V conforming to UL  |
| [Uimp] Rated Impulse Withstand Voltage | 4 kV during 1.2/50 $\mu$ s  |
| Contacts Material                      | AgNi  |
| [Ie] Rated Operational Current         | 10 A at 28 V (DC) NO conforming to IEC<br>10 A at 250 V (AC) NO conforming to IEC<br>5 A at 28 V (DC) NC conforming to IEC<br>5 A at 250 V (AC) NC conforming to IEC<br>10 A at 30 V (DC) conforming to UL<br>10 A at 277 V (AC) conforming to UL |
| Continuous Output Current              | 6.7 A   |
| Maximum Switching Voltage              | 250 V conforming to IEC   |
| Resistive Rated Load                   | 10 A at 250 V AC<br>10 A at 28 V DC   |
| Maximum Switching Capacity             | 2500 VA/280 W   |
| Minimum Switching Capacity             | 170 mW at 10 mA, 17 V   |
| Operating Rate                         | $\leq$ 1200 cycles/hour under load<br>$\leq$ 18000 cycles/hour no-load  |
| Mechanical Durability                  | 10000000 cycles   |
| Electrical Durability                  | 100000 cycles for resistive load  |
| Average Coil Consumption               | 0.9 W   |
| Drop-Out Voltage Threshold             | $\geq$ 0.1 U <sub>c</sub>   |

|   |                            |
|---|----------------------------|
| <b>Operate Time</b>                     | 20 ms                      |
| <b>Release Time</b>                     | 20 ms                      |
| <b>Average Coil Resistance</b>          | 2560 Ohm at 20 °C +/- 10 % |
| <b>Rated Operational Voltage Limits</b> | 38.4...52.8 V DC           |
| <b>Safety Reliability Data</b>          | B10d = 100000              |
| <b>Protection Category</b>              | RT I                       |
| <b>Test Levels</b>                      | Level A group mounting     |
| <b>Operating Position</b>               | Any position               |
| <b>Cad Overall Height</b>               | 82.8 mm                    |
| <b>Cad Overall Depth</b>                | 80.35 mm                   |
| <b>Net Weight</b>                       | 0.037 kg                   |
| <b>Device Presentation</b>              | Complete product           |

## Environment

|  |   |
|--|---|
| <b>Dielectric Strength</b>                   | 1300 V AC between contacts with micro disconnection<br>2000 V AC between coil and contact<br>2000 V AC between poles                    |
| <b>Product Certifications</b>                | UL<br>Lloyd's<br>CE<br>CSA<br>GOST<br>IECEE CB Scheme   |
| <b>Standards</b>                             | UL 508<br>IEC 61810-1<br>CSA C22.2 No 14  |
| <b>Ambient Air Temperature For Storage</b>   | -40...85 °C   |
| <b>Ambient Air Temperature For Operation</b> | -40...55 °C   |
| <b>Vibration Resistance</b>                  | 3 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles in operation<br>5 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles not operating |
| <b>Ip Degree Of Protection</b>               | IP40 conforming to IEC 60529  |
| <b>Shock Resistance</b>                      | 10 gn for in operation<br>30 gn for not operating   |
| <b>Pollution Degree</b>                      | 2   |

## Packing Units

|                                     |         |
|-------------------------------------|---------|
| <b>Unit Type Of Package 1</b>       | PCE     |
| <b>Number Of Units In Package 1</b> | 1       |
| <b>Package 1 Height</b>             | 4.1 cm  |
| <b>Package 1 Width</b>              | 2.1 cm  |
| <b>Package 1 Length</b>             | 2.8 cm  |
| <b>Package 1 Weight</b>             | 38.0 g  |
| <b>Unit Type Of Package 2</b>       | BB1     |
| <b>Number Of Units In Package 2</b> | 10      |
| <b>Package 2 Height</b>             | 3.1 cm  |
| <b>Package 2 Width</b>              | 10.3 cm |

|                              |          |
|------------------------------|----------|
| Package 2 Length             | 12.5 cm  |
| Package 2 Weight             | 392.0 g  |
| Unit Type Of Package 3       | S01      |
| Number Of Units In Package 3 | 120      |
| Package 3 Height             | 15.0 cm  |
| Package 3 Width              | 15.0 cm  |
| Package 3 Length             | 40.0 cm  |
| Package 3 Weight             | 4.958 kg |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

Reach Free Of Svhc

Rohs Exemption Information Yes

## Certifications & Standards

Reach Regulation

[REACH Declaration](#)

Eu Rohs Directive

Pro-active compliance (Product out of EU RoHS legal scope)

[EU RoHS Declaration](#)

China Rohs Regulation

[China RoHS declaration](#)

Environmental Disclosure

[Product Environmental Profile](#)

Weee

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

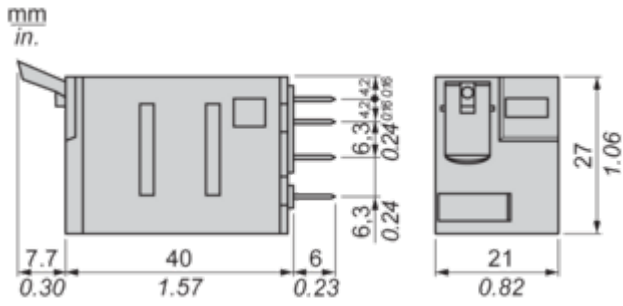
Circularity Profile

[End of Life Information](#)

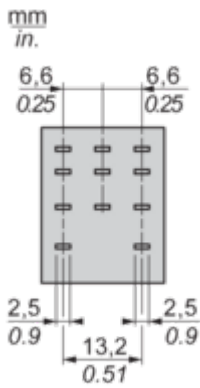
Dimensions Drawings

Dimensions

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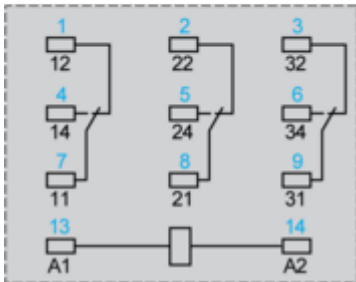
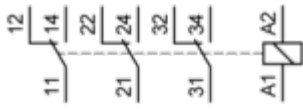
Pin Side View



Connections and Schema

Wiring Diagram

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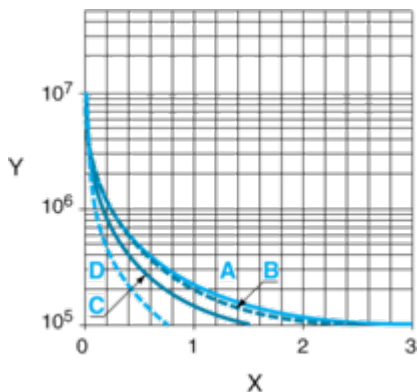
Symbols shown in blue correspond to Nema marking.

Performance Curves

Electrical Durability of Contacts

Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



X Switching capacity (kVA)

Y Durability (Number of operating cycles)

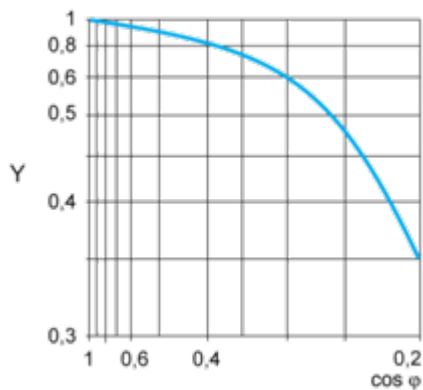
A RXM2AB...

B RXM3AB...

C RXM4AB...

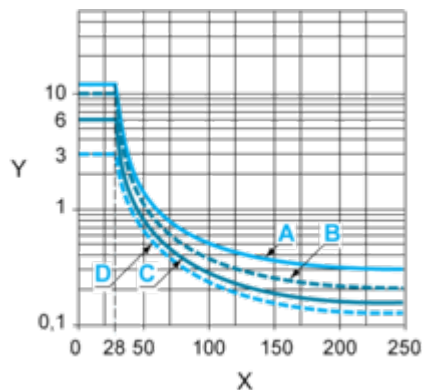
D RXM4GB...

Reduction coefficient for inductive AC load (depending on power factor cos φ)



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC

Y Current DC

A RXM2AB...

**B** RXM3AB...

**C** RXM4AB...

**D** RXM4GB...

**Note** : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

For inductive load, to increase relay life cycles, please add a proper load protection circuit (eg: RC protection/Varistor/free Wheeling diode -DC load only- ).

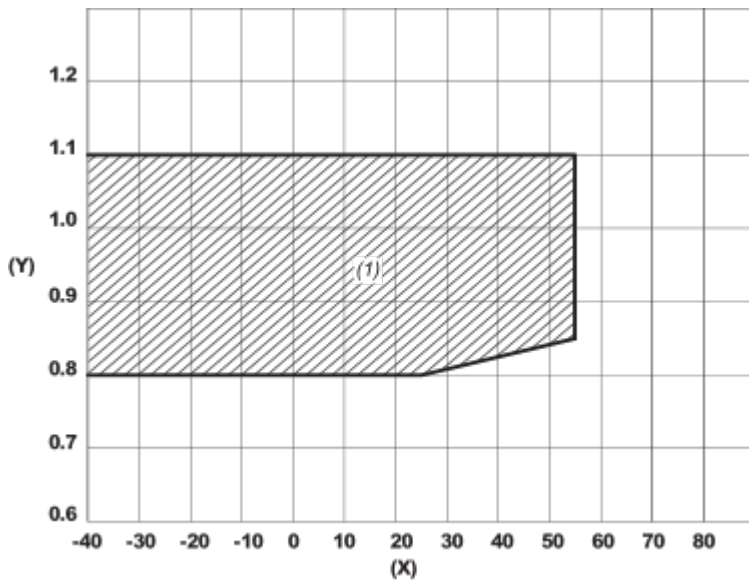
For low level loads (below 10mA), we recommend to use RXM\*GB series with bifurcated contacts relays instead.



Coil Operating Range

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DC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)

Y : AC coil voltage (U/Uc)

(1) Permitted operating range area