# **Product datasheet**





# Miniature plug-in relay, 10 A, 3 CO, 12 V DC

389837570

RXM3AB1JD

EAN Code: 3389119403603

### 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  | 12 V DC                          |
| Status Led                    | Without                          |
| Control Type                  | Lockable test button             |
| Utilisation Coefficient       | 20 %                             |

#### Complementary

| 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 μs  |
| Contacts Material                      | AgNi   |
| [le] Rated Operational Current         | 10 A at 28 V (DC) NO conforming to IEC 10 A at 250 V (AC) NO conforming to IEC 5 A at 28 V (DC) NC conforming to IEC 5 A at 250 V (AC) NC conforming to IEC 10 A at 30 V (DC) conforming to UL 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                         | <= 1200 cycles/hour under load<br><= 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             | >= 0.1 Uc  |

| Operate Time                     | 20 ms                     |  |
|----------------------------------|---------------------------|--|
| Release Time                     | 20 ms                     |  |
| Average Coil Resistance          | 160 Ohm at 20 °C +/- 10 % |  |
| Rated Operational Voltage Limits | 9.613.2 V DC              |  |
| Safety Reliability Data          | B10d = 100000             |  |
| Protection Category              | RTI                       |  |
| Test Levels                      | Level A group mounting    |  |
| Operating Position               | Any position              |  |
| Cad Overall Height               | 79 mm                     |  |
| Cad Overall Depth                | 78.45 mm                  |  |
| Net Weight                       | 0.037 kg                  |  |
| Device Presentation              | Complete product          |  |

## **Environment**

| Dielectric Strength                   | 1300 V AC between contacts with micro disconnection<br>2000 V AC between coil and contact<br>2000 V AC between poles           |
|---------------------------------------|--|
| Product Certifications                | UL<br>Lloyd's<br>CE<br>CSA<br>GOST<br>IECEE CB Scheme  |
| Standards                             | IEC 61810-1<br>CSA C22.2 No 14<br>UL 508   |
| Ambient Air Temperature For Storage   | -4085 °C   |
| Ambient Air Temperature For Operation | -4055 °C   |
| Vibration Resistance                  | 3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation 5 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles not operating |
| Ip Degree Of Protection               | IP40 conforming to IEC 60529   |
| Shock Resistance                      | 10 gn for in operation<br>30 gn for not operating  |
| Pollution Degree                      | 2  |

# **Packing Units**

| Unit Type Of Package 1       | PCE     |
|------------------------------|---------|
| Number Of Units In Package 1 | 1       |
| Package 1 Height             | 4.1 cm  |
| Package 1 Width              | 2.1 cm  |
| Package 1 Length             | 2.8 cm  |
| Package 1 Weight             | 39 g    |
| Unit Type Of Package 2       | BB1     |
| Number Of Units In Package 2 | 10      |
| Package 2 Height             | 3.1 cm  |
| Package 2 Width              | 10.3 cm |

| Package 2 Length             | 12.5 cm |
|------------------------------|---------|
| Package 2 Weight             | 400 g   |
| Unit Type Of Package 3       | S01     |
| Number Of Units In Package 3 | 120     |
| Package 3 Height             | 15 cm   |
| Package 3 Width              | 15 cm   |
| Package 3 Length             | 40 cm   |
| Package 3 Weight             | 5.06 kg |

# **Contractual warranty**

Warranty 18 months

# Sustainability Green Premium

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass 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

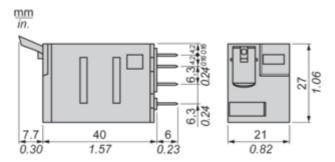
Yes

#### **Certifications & Standards**

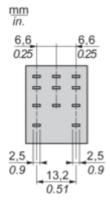
| Reach Regulation         | REACh Declaration   |
|--------------------------|---|
| Eu Rohs Directive        | Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration   |
| China Rohs Regulation    | China RoHS declaration  |
| Environmental Disclosure | Product Environmental 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**



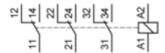
Pin Side View

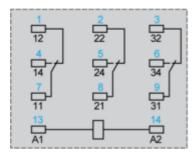


### RXM3AB1JD

Connections and Schema

#### Wiring Diagram



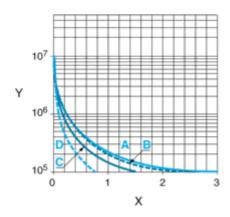


Symbols shown in blue correspond to Nema marking.

#### 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)

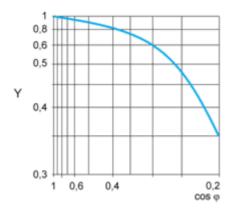
A RXM2AB ···

B RXM3AB\*\*\*

C RXM4AB•••

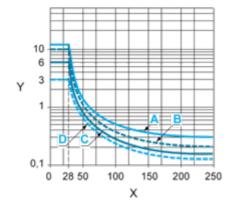
D RXM4GB\*\*\*

Reduction coefficient for inductive AC load (depending on power factor  $\cos \phi$ )



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



Y Current DC

A RXM2AB\*\*\*

### **Product datasheet**

#### RXM3AB1JD

B RXM3AB\*\*\*

C RXM4AB\*\*\*

D RXM4GB\*\*\*

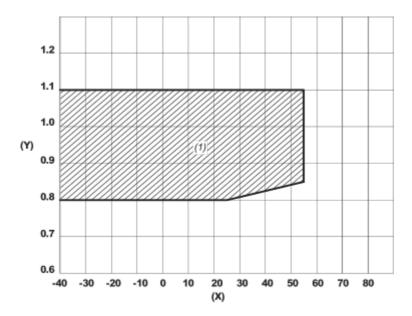
Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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**

#### **DC Coil Operating Range VS Ambient Temperature**



 $\mathbf{X}$ : Ambient temperature (°C)

Y: AC coil voltage (U/Uc)

(1) Permitted operating range area