Specifications





# Harmony, Miniature plug-in relay, 6 A, 4 CO, with lockable test button, 48 V DC

RXM4AB1ED

#### 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 | 4 C/O                            |
| [Uc] Control Circuit Voltage  | 48 V DC                          |
| Status Led                    | Without                          |
| Control Type                  | Lockable test button             |
| Utilisation Coefficient       | 20 %                             |
|                               |                                  |

## Complementary

| compromontary                             |   |
|---|---|
| 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<br>Voltage | 2.5 kV during 1.2/50 μs   |
| Contacts Material                         | AgNi  |
| [Ie] Rated Operational Current            | 3 A at 28 V (DC) NC conforming to IEC<br>3 A at 250 V (AC) NC conforming to IEC<br>6 A at 28 V (DC) NO conforming to IEC<br>6 A at 250 V (AC) NO conforming to IEC<br>6 A at 277 V (AC) conforming to UL<br>8 A at 30 V (DC) conforming to UL |
| Continuous Output Current                 | 5 A   |
| Maximum Switching Voltage                 | 250 V conforming to IEC   |
| Resistive Rated Load                      | 6 A at 250 V AC<br>6 A at 28 V DC   |
| Maximum Switching Capacity                | 1500 VA/168 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                     | 1000000 cycles  |
| Electrical Durability                     | 100000 cycles for resistive load  |
| Average Coil Consumption                  | 0.9 W   |
| Drop-Out Voltage Threshold                | >= 0.1 Uc   |

Excluding VAT, FCA Jabal Ali & are subject to change - check with your local distributor.

| Operate Time                     | 20 ms                      |  |
|----------------------------------|----------------------------|--|
| Release Time                     | 20 ms                      |  |
| Average Coil Resistance          | 2560 Ohm at 20 °C +/- 10 % |  |
| Rated Operational Voltage Limits | 38.452.8 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             |
|--|---|
|  | 2000 V AC between coil and contact with basic insulation        |
|  | 2000 V AC between poles with basic insulation                   |
| Product Certifications                   | UL  |
|  | Lloyd's   |
|  | CE  |
|  | CSA   |
|  | GOST  |
|  | IECEE CB Scheme   |
| Standards                                | CSA C22.2 No 14   |
|  | IEC 61810-1   |
|  | UL 508  |
| Ambient Air Temperature For<br>Storage   | -4085 °C  |
| Ambient Air Temperature For<br>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  |
|  | 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             | 2.100 cm  |
| Package 1 Width              | 2.800 cm  |
| Package 1 Length             | 4.800 cm  |
| Package 1 Weight             | 35.000 g  |
| Unit Type Of Package 2       | BB1       |
| Number Of Units In Package 2 | 10        |
| Package 2 Height             | 3.100 cm  |
| Package 2 Width              | 10.300 cm |

| Package 2 Length             | 12.100 cm |
|------------------------------|-----------|
| Package 2 Weight             | 376.000 g |
| Unit Type Of Package 3       | S02       |
| Number Of Units In Package 3 | 240       |
| Package 3 Height             | 15.000 cm |
| Package 3 Width              | 30.000 cm |
| Package 3 Length             | 40.000 cm |
| Package 3 Weight             | 9.485 kg  |

# Contractual warranty

Warranty

18 months

# Sustainability Screen 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

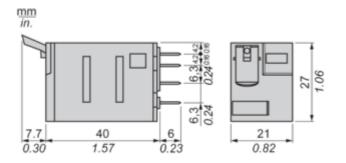
Reach Free Of Svhc
Toxic Heavy Metal Free
Mercury Free
Rohs Exemption Information Yes

### **Certifications & Standards**

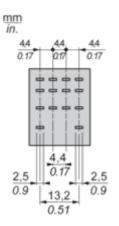
| Reach Regulation         | REACh Declaration   |
|--------------------------|---|
| Eu Rohs Directive        | Pro-active compliance (Product out of EU RoHS legal scope)<br>EU RoHS Declaration   |
| China Rohs Regulation    | China RoHS declaration  |
| Environmental Disclosure | Product Environmental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

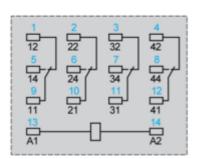


Pin Side View



Connections and Schema

#### Wiring Diagram

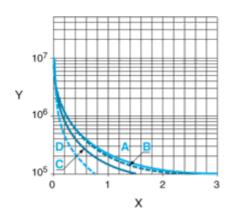


Symbols shown in blue correspond to Nema marking.

#### Performance Curves

#### **Electrical Durability of Contacts**

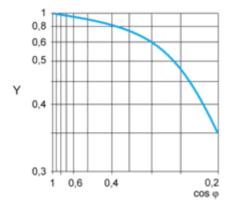
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

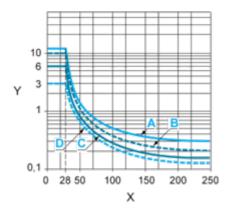
- Y Durability (Number of operating cycles)
- A RXM2AB ····
- B RXM3AB...
- C RXM4AB•••
- D RXM4GB····

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



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC Y Current DC A RXM2AB•••

### RXM4AB1ED

B RXM3AB ····

**C** RXM4AB•••

D RXM4GB····

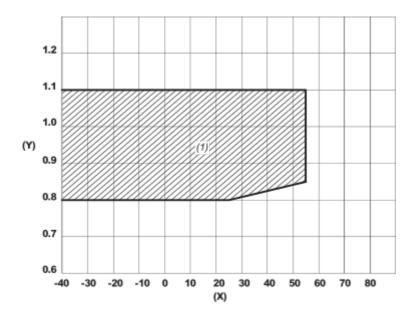
Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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



X : Ambient temperature (°C)

Y: AC coil voltage (U/Uc)

(1) Permitted operating range area