# Product data sheet

Specifications


## miniature plug in relay, Harmony Electromechanical Relays, 12A, 2CO, lockable test but to n, 24V DC

RXM2AB1BD

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Range of Product** | Harmony Electromechanical Relays |
| **Series name** | RXM series |
| **Product or Component Type** | Plug-in relay |
| **Relay Type** | Miniature relay |
| **Contacts type and composition** | 2 C/O |
| **Status LED** | Without |
| **Control Type** | Lockable test button |
| **[Uc] control circuit voltage** | 24 V DC |
| **[Ithe] conventional enclosed thermal current** | 12 A |
| **Continuous output current** | 10 A |

## Complementary

| | |
|---|---|
| **[Uimp] rated impulse withstand voltage** | 4 kV 1.2/50 µs |
| **[Ie] rated operational current** | 12 A 28 V DC) NO IEC<br>12 A 250 V AC) NO IEC<br>6 A 28 V DC) NC IEC<br>6 A 250 V AC) NC IEC<br>12 A 28 V DC) UL<br>12 A 277 V AC) UL |
| **Minimum switching capacity** | 170 mW 10 mA, 17 V |
| **Electrical durability** | 100000 cycles resistive |
| **Rated operational voltage limits** | 19.2...26.4 V DC |
| **[Ui] rated insulation voltage** | 250 V IEC<br>300 V CSA<br>300 V UL |
| **Maximum switching voltage** | 250 V IEC |
| **Drop-out voltage threshold** | >= 0.1 Uc |
| **Load current** | 12 A 250 V AC<br>12 A 28 V DC |
| **Operating time** | 20 ms |
| **Maximum switching capacity** | 3000 VA/336 W |
| **Average resistance** | 650 Ohm 20 °C +/- 10 % |
| **Average coil consumption** | 0.9 W |
| **Mechanical durability** | 10000000 cycles |
| **Safety reliability data** | B10d = 100000 |

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| | |
|---|---|
| **Operating rate** | <= 1200 cycles/hour under load<br><= 18000 cycles/hour no-load |
| **Utilisation coefficient** | 20 % |
| **Reset time** | 20 ms |
| **Dielectric strength** | 1300 V AC between contacts with micro disconnection<br>2000 V AC between coil and contact with basic insulation<br>2000 V AC between poles with basic insulation |
| **Compatibility code** | RXM |
| **Protection category** | RT I |
| **pollution degree** | 3 |
| **Operating position** | Any position |
| **Test levels** | Level A group mounting |
| **Device presentation** | Complete product |
| **Contacts material** | AgNi |
| **Shape of pin** | Flat (faston type) |
| **Net Weight** | 0.082 lb(US) (0.037 kg) |

## Environment

| | |
|---|---|
| **Ambient air temperature for operation** | -40…131 °F (-40…55 °C) |
| **IP degree of protection** | IP40 conforming to IEC 60529 |
| **Standards** | CSA C22.2 No 14<br>UL 508<br>IEC 61810-1 |
| **Product Certifications** | UL<br>Lloyd's<br>CE<br>CSA<br>GOST<br>IECEE CB Scheme |
| **Ambient Air Temperature for Storage** | -40…185 °F (-40…85 °C) |
| **Vibration resistance** | 3 gn +/- 1 mm 10…150 Hz)5 cycles in operation<br>5 gn +/- 1 mm 10…150 Hz)5 cycles not operating |
| **Shock resistance** | 10 gnin operation<br>30 gnnot operating |

## Ordering and shipping details

| | |
|---|---|
| **Category** | US10CP221127 |
| **Discount Schedule** | 0CP2 |
| **GTIN** | 3389119403399 |
| **Returnability** | Yes |
| **Country of origin** | CN |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 1.89 in (4.8 cm) |
| **Package 1 Width** | 0.83 in (2.1 cm) |

| | |
|---|---|
| **Package 1 Length** | 1.06 in (2.7 cm) |
| **Package 1 Weight** | 1.3 oz (36 g) |
| **Unit Type of Package 2** | BB1 |
| **Number of Units in Package 2** | 10 |
| **Package 2 Height** | 1.18 in (3 cm) |
| **Package 2 Width** | 4.02 in (10.2 cm) |
| **Package 2 Length** | 4.92 in (12.5 cm) |
| **Package 2 Weight** | 13.9 oz (393 g) |
| **Unit Type of Package 3** | S02 |
| **Number of Units in Package 3** | 240 |
| **Package 3 Height** | 5.91 in (15 cm) |
| **Package 3 Width** | 11.81 in (30 cm) |
| **Package 3 Length** | 15.75 in (40 cm) |
| **Package 3 Weight** | 21.888 lb(US) (9.928 kg) |

## Contractual warranty

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

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Environmental footprint

| | |
|---|---|
| Carbon footprint (kg CO2 eq, Total Life cycle) | 30 |
| Environmental Disclosure | Product Environmental Profile |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| REACh Regulation | REACh Declaration |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |

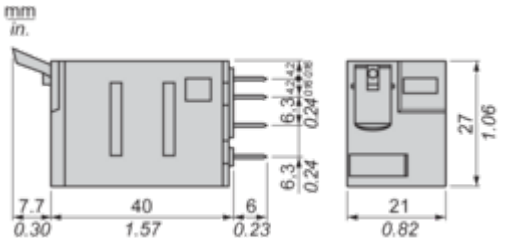
## Use Again

### Repack and remanufacture

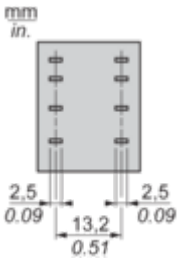
| | |
|---|---|
| Circularity Profile | End of Life Information |
| Take-back | No |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |

Dimensions Drawings

## Dimensions

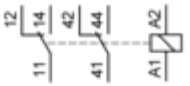


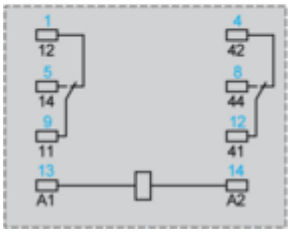

Pin Side View



## Connections and Schema

### Wiring Diagram



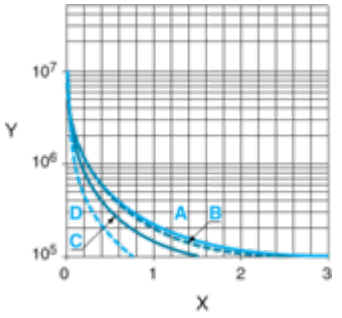




Symbols shown in blue correspond to Nema marking.

## Performance Curves

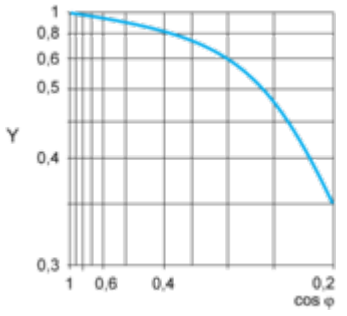
### Electrical Durability of Contacts

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



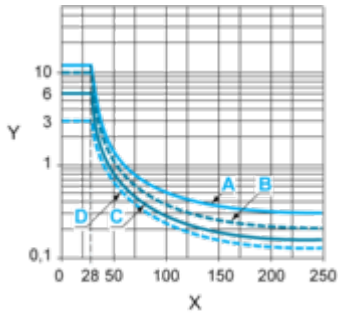

**X** Switching capacity (kVA)
**Y** Durability (Number of operating cycles)
**A** RXM2AB•••
**B** RXM3AB•••
**C** RXM4AB•••
**D** RXM4GB•••

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




**Y** Reduction coefficient (A)

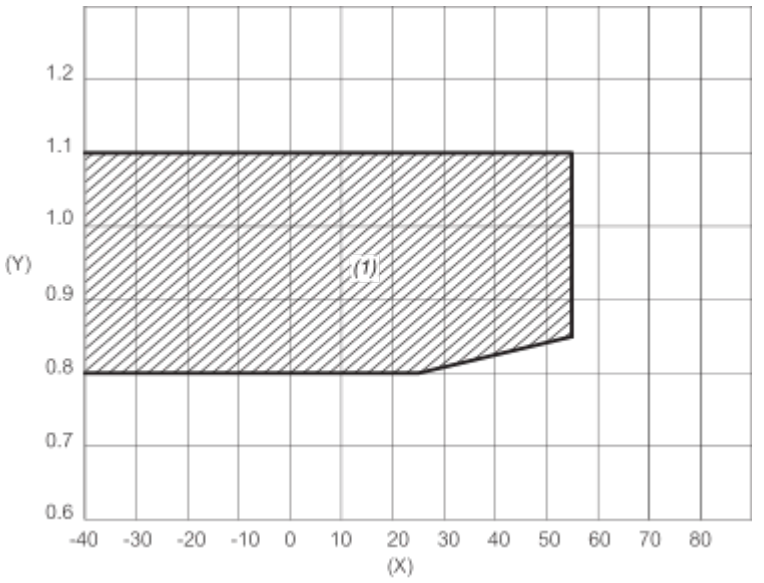
Maximum switching capacity on resistive DC load




**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

### DC Coil Operating Range VS Ambient Temperature




**X :** Ambient temperature (°C)
**Y :** AC coil voltage (U/Uc)
**(1)** Permitted operating range area

Technical Illustration

**Dimensions**

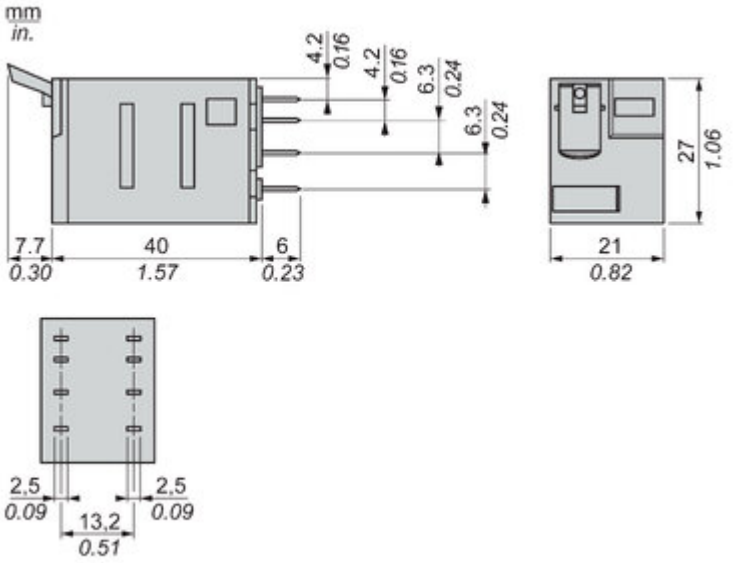
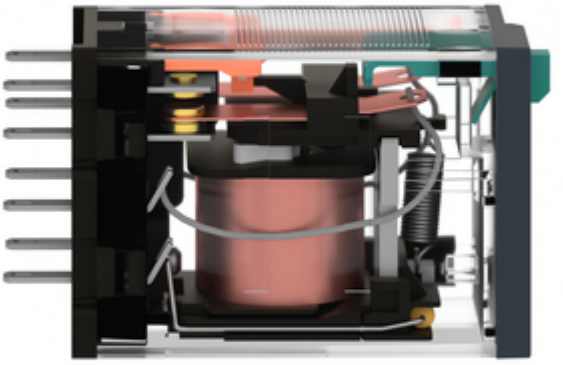
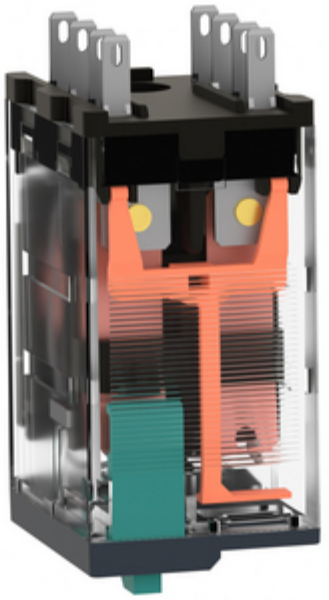
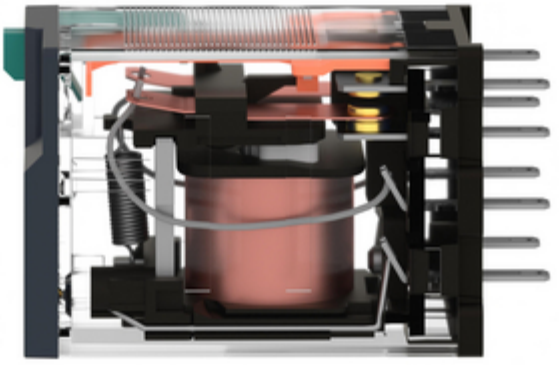


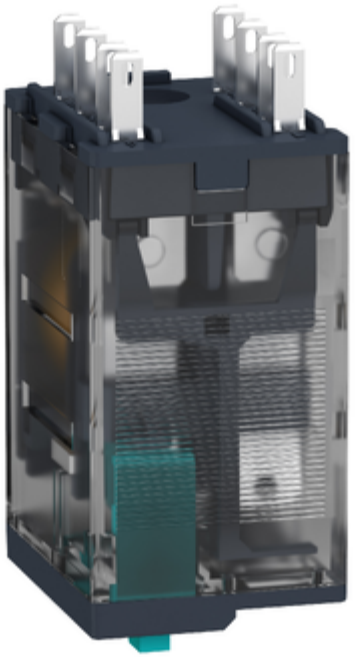
Image of product / Alternate images

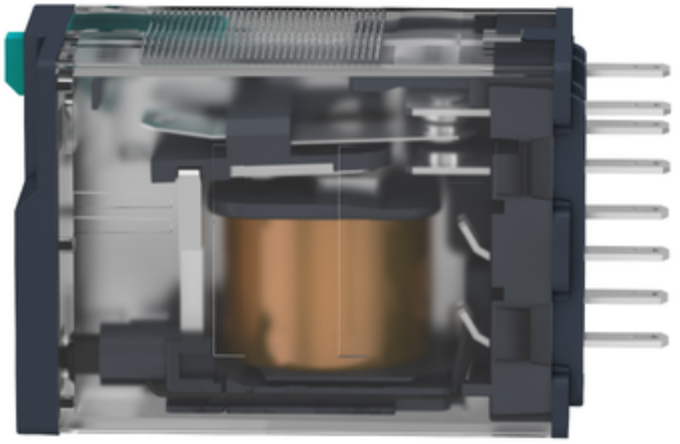
**Alternative**







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4
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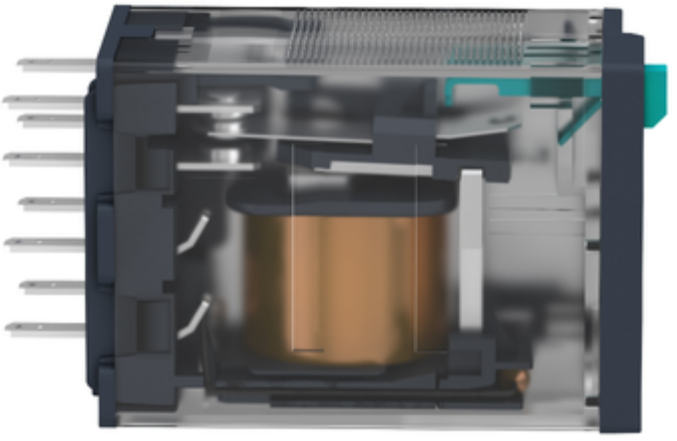


RXM
24 VDC
Schneider
Electric