# Product datasheet

Specifications


## Miniature plug-in relay, 12 A, 2 CO, LED, 48 V AC

RXM2AB2E7

## 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** | 2 C/O |
| **[Uc] control circuit voltage** | 48 V AC 50/60 Hz |
| **Status LED** | With |
| **Control type** | Lockable test button |
| **Continuous output current** | 10 A |

## Complementary

| | |
|---|---|
| **[Uimp] rated impulse withstand voltage** | 4 kV during 1.2/50 µs |
| **[Ie] rated operational current** | 12 A at 28 V (DC) NO conforming to IEC<br>12 A at 250 V (AC) NO conforming to IEC<br>6 A at 28 V (DC) NC conforming to IEC<br>6 A at 250 V (AC) NC conforming to IEC<br>12 A at 28 V (DC) conforming to UL<br>12 A at 277 V (AC) conforming to UL |
| **Minimum switching capacity** | 170 mW at 10 mA, 17 V |
| **Electrical durability** | 100000 cycles for resistive load |
| **average coil consumption in VA** | 1.2 at 60 Hz |
| **Average consumption** | 1.2 VA at 60 Hz |
| **operate time** | 20 ms |
| **average coil resistance** | 710 Ohm at 20 °C +/- 15 % |
| **Rated operational voltage limits** | 38.4...52.8 V AC |
| **[Ui] rated insulation voltage** | 250 V conforming to IEC<br>300 V conforming to CSA<br>300 V conforming to UL |
| **Maximum switching voltage** | 250 V conforming to IEC |
| **Drop-out voltage threshold** | >= 0.15 Uc |
| **Load current** | 12 A at 250 V AC<br>12 A at 28 V DC |
| **Maximum switching capacity** | 3000 VA/336 W |
| **CAD overall height** | 79 mm |
| **CAD overall depth** | 78.45 mm |

| | |
|---|---|
| **Mechanical durability** | 10000000 cycles |
| **Safety reliability data** | B10d = 100000 |
| **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 |
| **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 |
| **Net weight** | 0.037 kg |

## Environment

| | |
|---|---|
| **Ambient air temperature for operation** | -40…55 °C |
| **IP degree of protection** | IP40 conforming to IEC 60529 |
| **Standards** | UL 508<br>IEC 61810-1<br>CSA C22.2 No 14 |
| **Product certifications** | UL<br>Lloyd's<br>CE<br>CSA<br>GOST<br>IECEE CB Scheme |
| **Ambient air temperature for storage** | -40…85 °C |
| **Vibration resistance** | 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 |
| **Shock resistance** | 10 gn for in operation<br>30 gn for not operating |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 4.7 cm |
| **Package 1 Width** | 2.1 cm |
| **Package 1 Length** | 2.7 cm |
| **Package 1 Weight** | 37.0 g |
| **Unit Type of Package 2** | BB1 |
| **Number of Units in Package 2** | 10 |
| **Package 2 Height** | 3.0 cm |
| **Package 2 Width** | 10.1 cm |

| | |
|---|---|
| **Package 2 Length** | 12.5 cm |
| **Package 2 Weight** | 399.0 g |
| **Unit Type of Package 3** | S02 |
| **Number of Units in Package 3** | 240 |
| **Package 3 Height** | 15.0 cm |
| **Package 3 Width** | 30.0 cm |
| **Package 3 Length** | 40.0 cm |
| **Package 3 Weight** | 9.91 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.

How this information helps you

### Environmental footprint

| | |
|---|---|
| Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) | **20** |
| 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** |
| China RoHS Regulation | **China RoHS declaration** |

## Use Again

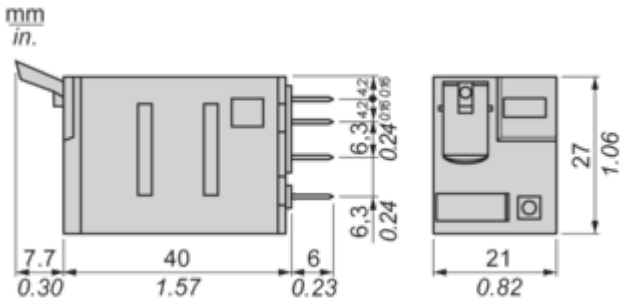
### Repack and remanufacture

| | |
|---|---|
| Circularity Profile | **End of Life Information** |

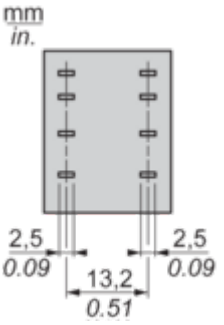
| | |
|---|---|
| WEEE |  **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins** |
| Take-back | **No** |

Dimensions Drawings

## Dimensions

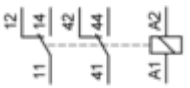


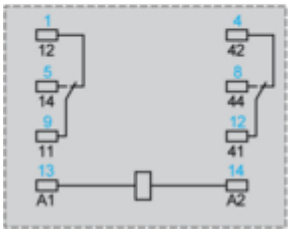

Pin Side View



## Connections and Schema

### Wiring Diagram



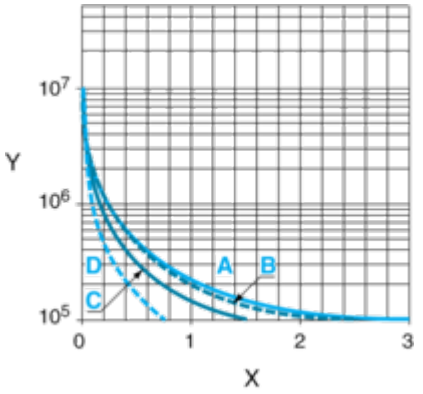




Symbols shown in blue correspond to Nema marking.

## Performance Curves

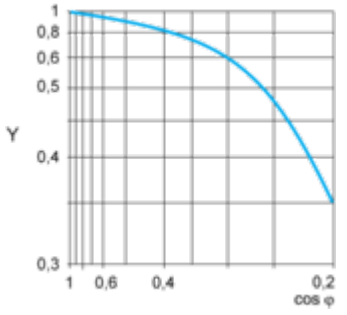
### Electrical Durability of Contacts

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



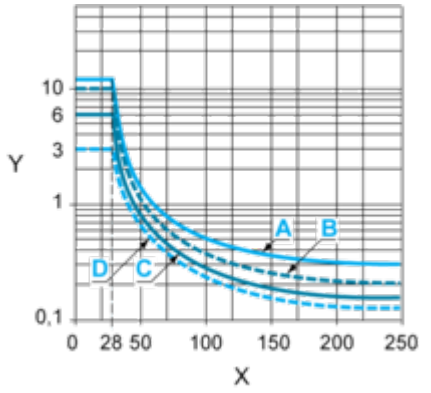

**X** Switching capacity (kVA)
**Y** Durability (Number of operating cycles)
**A** RXM2AB•••
**B** RXM3AB•••
**C** RXM4AB•••
**D** RXM4GB•••

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




**Y** Reduction coefficient (A)

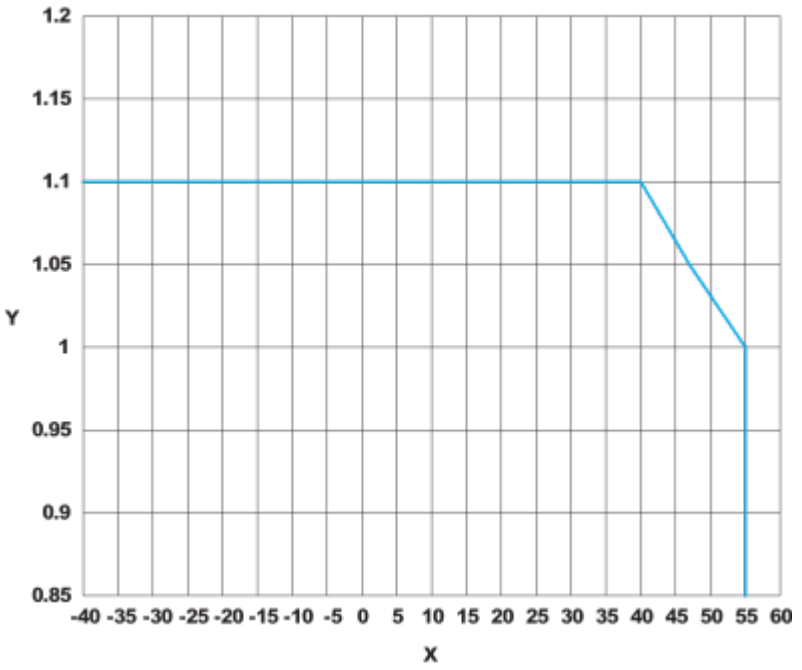
Maximum switching capacity on resistive DC load




**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.

AC Coil Voltage and Operating Temperature under continuous duty




**X :** Operating temperature (°C)
**Y :** AC coil voltage (UC)

Technical Illustration

**Dimensions**

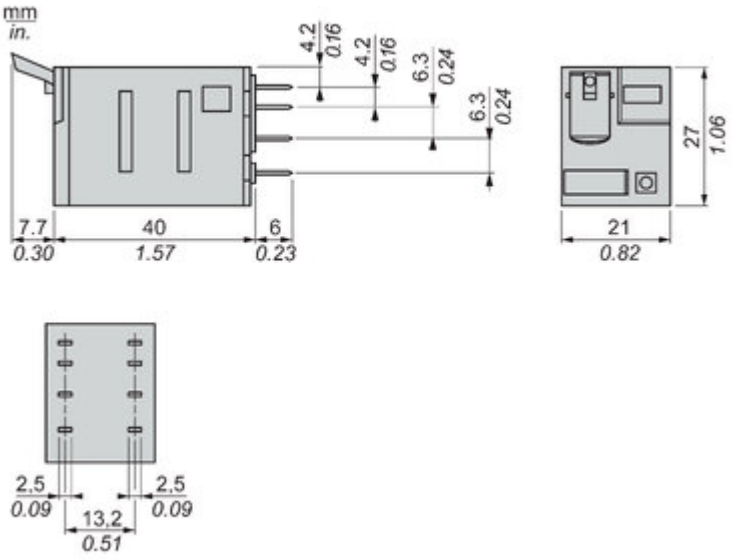
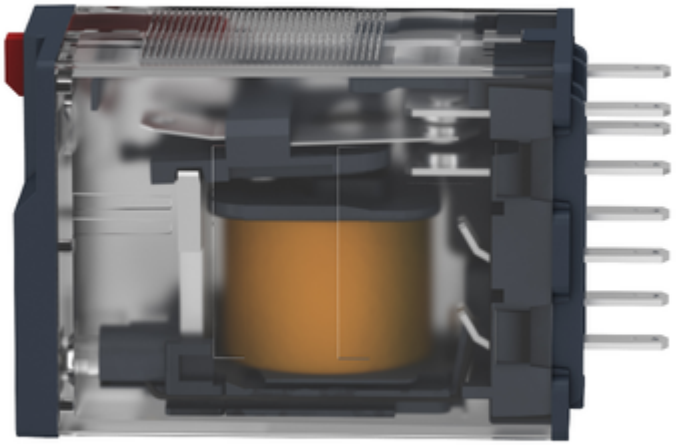
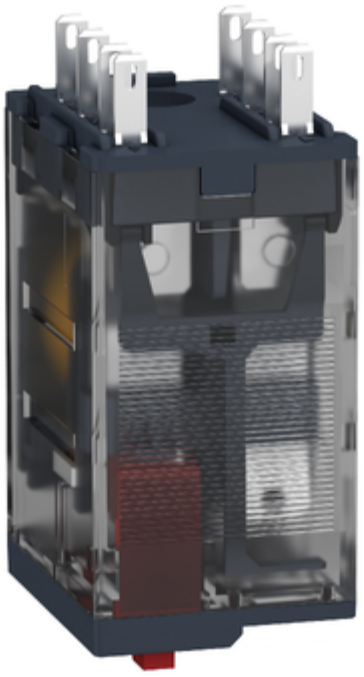
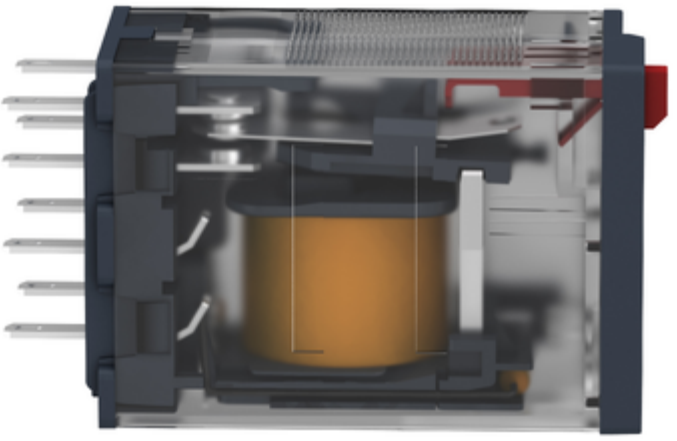


Image of product / Alternate images

**Alternative**







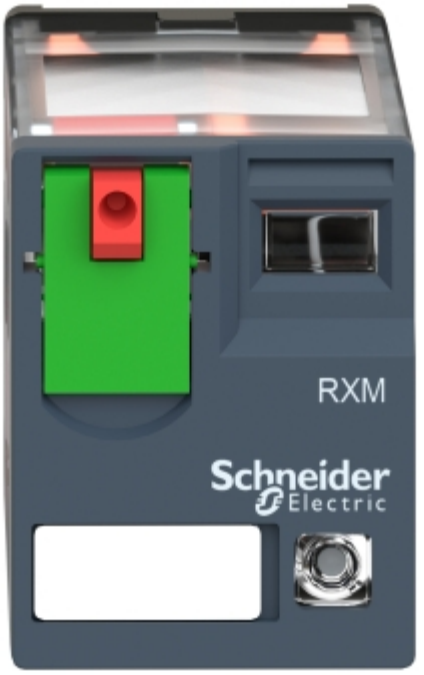

RXM
Schneider
Electric

Image of product in real life situation