



### 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  | 120 V AC 50/60 Hz                |
| 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         | 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 |
| Continuous output current              | 10 A  |
| Maximum switching voltage              | 250 V conforming to IEC   |
| Resistive rated load                   | 12 A at 250 V AC<br>12 A at 28 V DC   |
| Maximum switching capacity             | 3000 VA/336 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 in VA         | 1.2 at 60 Hz  |
| Average consumption                    | 1.2 VA at 60 Hz   |
| Drop-out voltage threshold             | $\geq$ 0.15 U <sub>c</sub>  |
| Operate time                           | 20 ms   |
| Release time                           | 20 ms   |
| Average coil resistance                | 4430 Ohm at 20 °C +/- 15 %  |
| Rated operational voltage limits       | 96...132 V AC   |
| Safety reliability data                | B10d = 100000   |
| Protection category                    | RT I  |
| Test levels                            | Level A group mounting  |
| Operating position                     | Any position  |
| Net weight                             | 0.037 kg  |
| Device presentation                    | Complete product  |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

|                                       |  |
|---------------------------------------|--|
| 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 |
| Product certifications                | UL [RETURN] Lloyd's [RETURN] CE [RETURN] CSA [RETURN] GOST [RETURN] IEC CB Scheme  |
| Standards                             | UL 508<br>IEC 61810-1<br>CSA C22.2 No 14   |
| Ambient air temperature for storage   | -40...85 °C  |
| Ambient air temperature for operation | -40...55 °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                        |
| IP degree of protection               | IP40 conforming to IEC 60529   |
| Shock resistance                      | 10 gn for in operation<br>30 gn for not operating  |
| Pollution degree                      | 3  |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 5.1 cm   |
| Package 1 Width              | 2.1 cm   |
| Package 1 Length             | 2.72 cm  |
| Package 1 Weight             | 37 g     |
| Unit Type of Package 2       | BB1      |
| Number of Units in Package 2 | 10       |
| Package 2 Height             | 3 cm     |
| Package 2 Width              | 10.2 cm  |
| Package 2 Length             | 12.5 cm  |
| Package 2 Weight             | 382 g    |
| Unit Type of Package 3       | S02      |
| Number of Units in Package 3 | 240      |
| Package 3 Height             | 15 cm    |
| Package 3 Width              | 30 cm    |
| Package 3 Length             | 40 cm    |
| Package 3 Weight             | 9.643 kg |

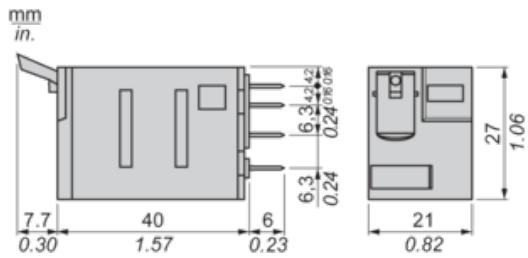
## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>                              |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| RoHS exemption information | <a href="#">Yes</a>   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

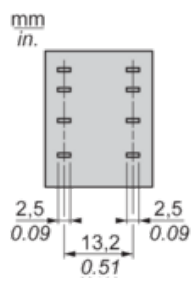
## Contractual warranty

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

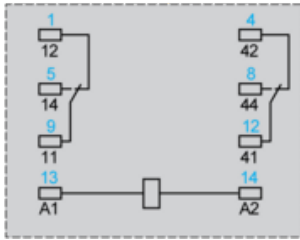
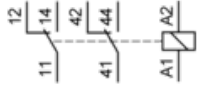
Dimensions



Pin Side View



## Wiring Diagram

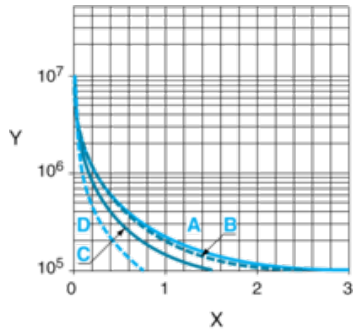


Symbols shown in blue correspond to Nema marking.

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)

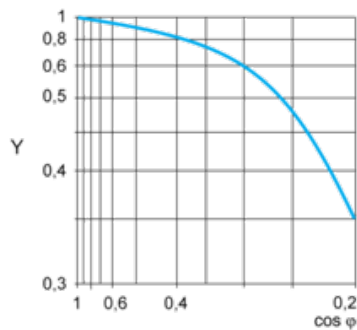
A RXM2AB...

B RXM3AB...

C RXM4AB...

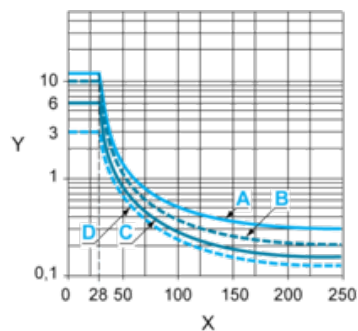
D RXM4GB...

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...

B RXM3AB...

C RXM4AB...

D RXM4GB...

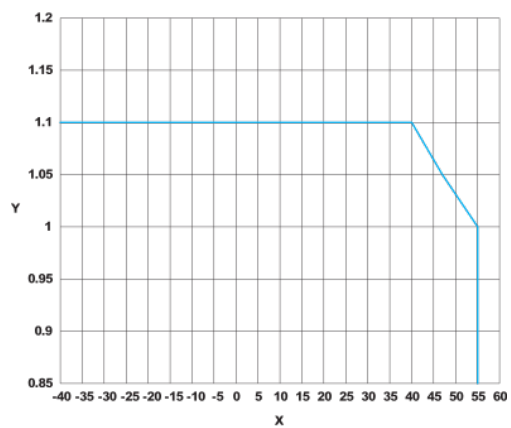
Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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.

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#### AC Coil Voltage and Operating Temperature under continuous duty



X : Operating temperature (°C)

Y : AC coil voltage (UC)