

# Product data sheet

Specifications



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

RXM2AB2BD

## 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	24 V DC
Status LED	With
Control type	Lockable test button
Utilisation coefficient	20 %

## Complementary

Shape of pin	Flat
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 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 12 A at 250 V (AC) NO conforming to IEC 6 A at 28 V (DC) NC conforming to IEC 6 A at 250 V (AC) NC conforming to IEC 12 A at 28 V (DC) conforming to UL 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 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 $\leq$ 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	$\geq$ 0.1 U <sub>c</sub>

operate time	20 ms
release time	20 ms
average coil resistance	650 Ohm at 20 °C +/- 10 %
Rated operational voltage limits	19.2...26.4 V DC
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

## 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 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 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 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	2.0 cm
Package 1 Width	2.8 cm
Package 1 Length	4.8 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	10.0 cm
Package 2 Length	12.5 cm
Package 2 Weight	396.0 g

<b>Unit Type of Package 3</b>	S02
<b>Number of Units in Package 3</b>	240
<b>Package 3 Height</b>	15.0 cm
<b>Package 3 Width</b>	30.0 cm
<b>Package 3 Length</b>	40.0 cm
<b>Package 3 Weight</b>	9.994 kg

## **Contractual warranty**

<b>Warranty</b>	18 months
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## Sustainability

**Green Premium™** label is Schneider Electric's commitment to delivering products with best-in-class 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)

[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](#)

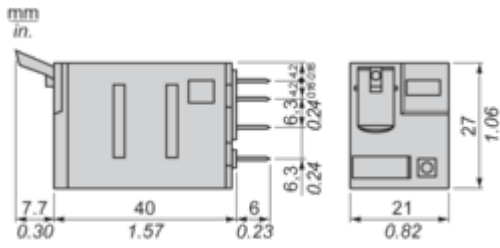
California Proposition 65

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](http://www.P65Warnings.ca.gov)

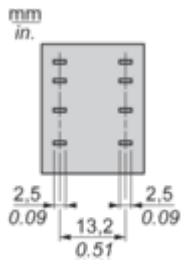
Dimensions Drawings

Dimensions

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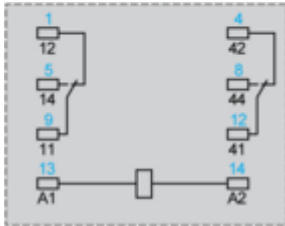
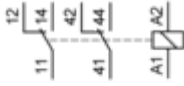
Pin Side View



Connections and Schema

Wiring Diagram

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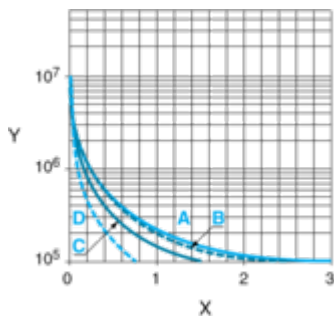
Symbols shown in blue correspond to Nema marking.

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)

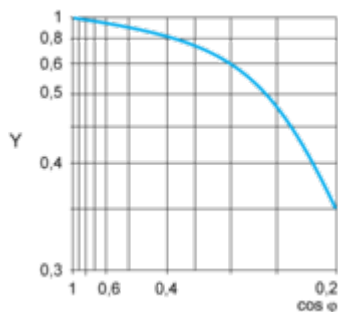
A RXM2AB...

B RXM3AB...

C RXM4AB...

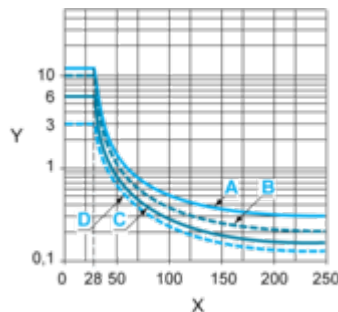
D RXM4GB...

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...

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.

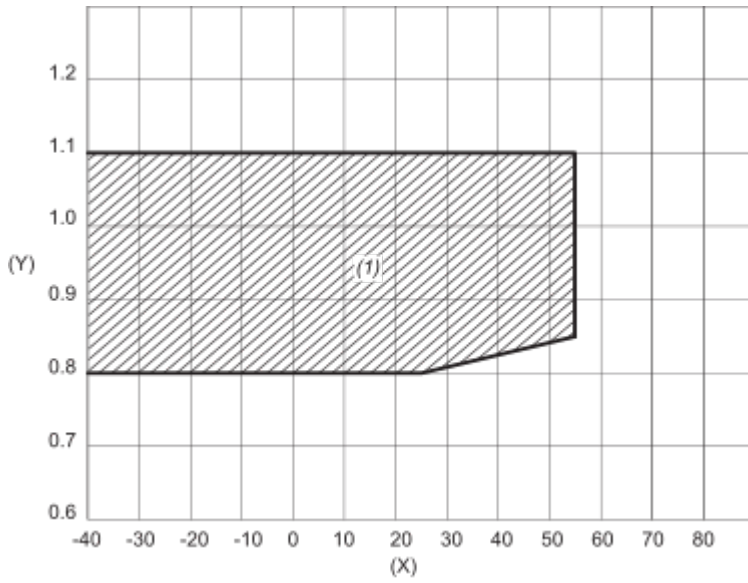




Coil Operating Range

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DC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)

Y : AC coil voltage (U/Uc)

(1) Permitted operating range area