

# Product datasheet

Specifications



## Miniature plug-in relay, 12 A, 2 CO, LED, 24 V 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
Continuous output current	10 A

### Complementary

[Uimp] rated impulse withstand voltage	4 kV during 1.2/50 $\mu$ s
[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
Minimum switching capacity	170 mW at 10 mA, 17 V
Electrical durability	100000 cycles for resistive load
operate time	20 ms
average coil resistance	650 Ohm at 20 °C +/- 10 %
Rated operational voltage limits	19.2...26.4 V DC
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
Maximum switching voltage	250 V conforming to IEC
Drop-out voltage threshold	$\geq 0.1 U_c$
Load current	12 A at 250 V AC 12 A at 28 V DC
Maximum switching capacity	3000 VA/336 W
Average coil consumption	0.9 W
Mechanical durability	10000000 cycles
Safety reliability data	B10d = 100000

<b>Operating rate</b>	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
<b>Utilisation coefficient</b>	20 %
<b>Reset time</b>	20 ms
<b>Dielectric strength</b>	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
<b>Protection category</b>	RT I
<b>Pollution degree</b>	3
<b>Operating position</b>	Any position
<b>Test levels</b>	Level A group mounting
<b>Device presentation</b>	Complete product
<b>Contacts material</b>	AgNi
<b>Shape of pin</b>	Flat
<b>Net weight</b>	0.037 kg

## Environment

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

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	2.0 cm
<b>Package 1 Width</b>	2.8 cm
<b>Package 1 Length</b>	4.8 cm
<b>Package 1 Weight</b>	37.0 g
<b>Unit Type of Package 2</b>	BB1
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	3.0 cm
<b>Package 2 Width</b>	10.0 cm
<b>Package 2 Length</b>	12.5 cm
<b>Package 2 Weight</b>	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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## 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)	35
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Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	Yes
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<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
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REACH Regulation	<a href="#">REACH Declaration</a>
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China RoHS Regulation	<a href="#">China RoHS declaration</a>
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## Use Again

### Repack and remanufacture

Circularity Profile	<a href="#">End of Life Information</a>
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WEEE



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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Take-back

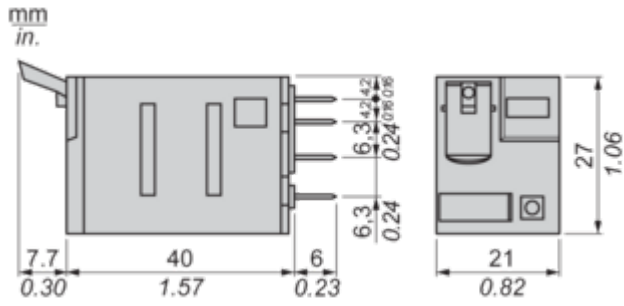
No

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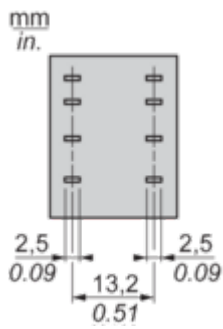
Dimensions Drawings

Dimensions

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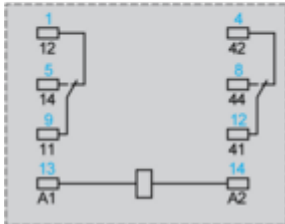
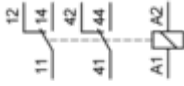
Pin Side View



Connections and Schema

Wiring Diagram

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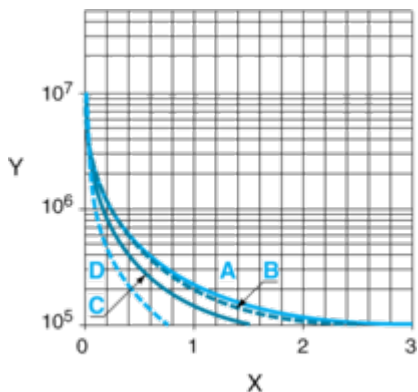
Symbols shown in blue correspond to Nema marking.

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)

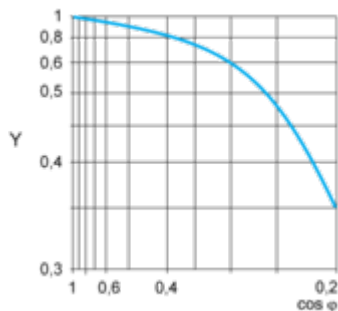
A RXM2AB...

B RXM3AB...

C RXM4AB...

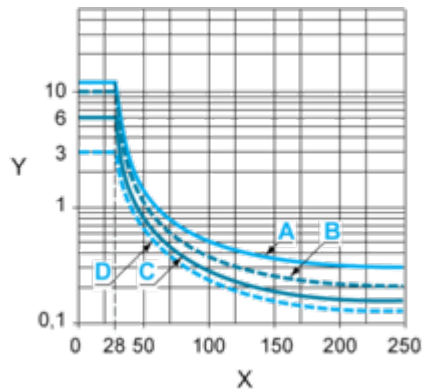
D RXM4GB...

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

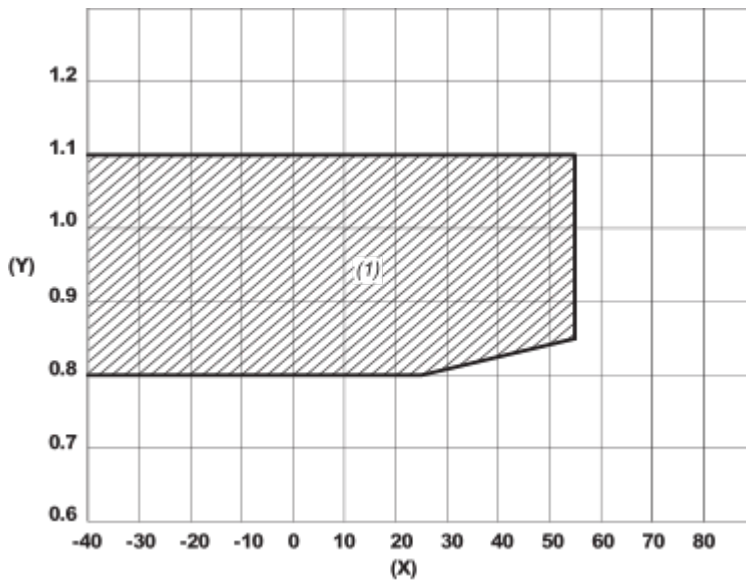
For inductive load, to increase relay life cycles, please add a proper load protection circuit (eg: RC protection/Varistor/free Wheeling diode -DC load only- ).

For low level loads (below 10mA), we recommend to use RXM\*GB series with bifurcated contacts relays instead.

Coil Operating Range

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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

Technical Illustration

Dimensions

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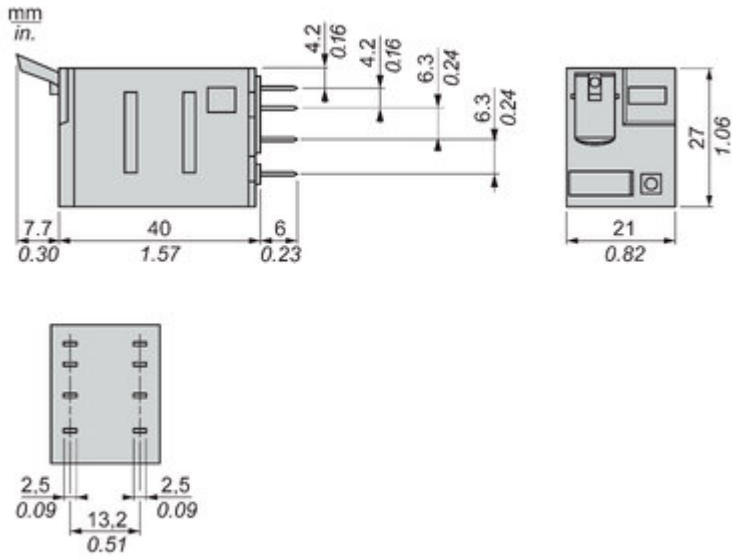
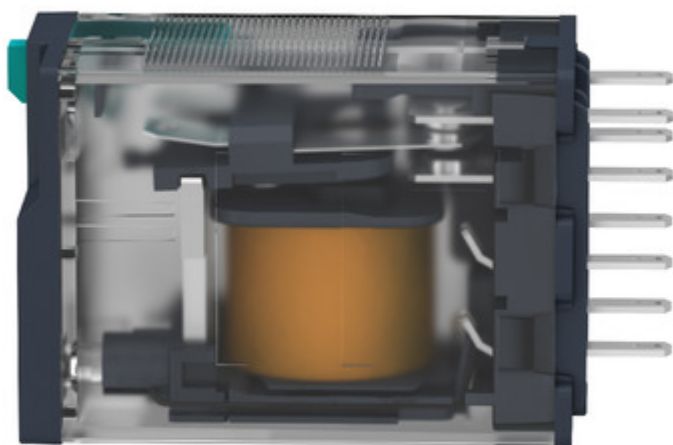
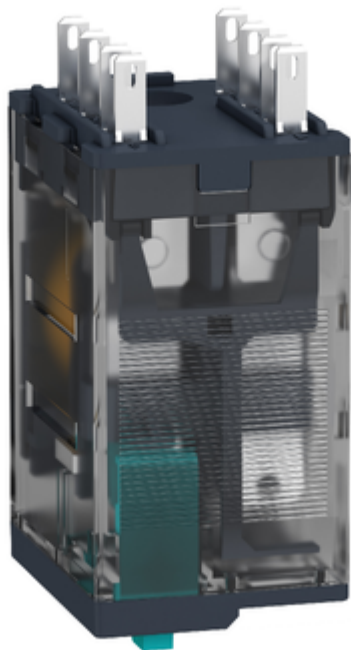


Image of product / Alternate images

Alternative

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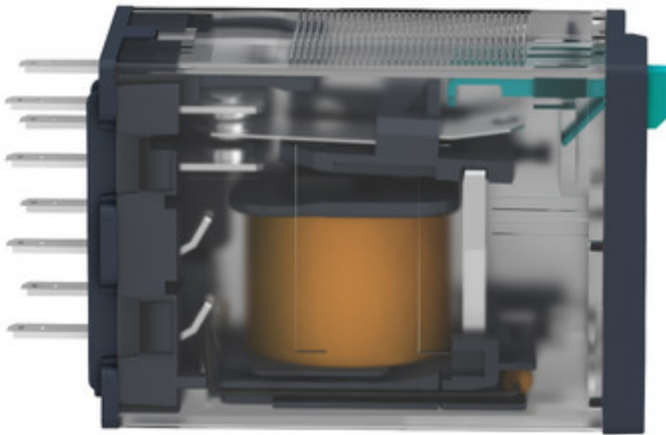




Image of product in real life situation

