

Product datasheet

Specifications



Miniature plug-in relay, 12 A, 2 CO, 24 V DC

RXM2AB1BD

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	Without
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 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	>= 0.1 Uc
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

Disclaimer: 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

Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Utilisation coefficient	20 %
Reset time	20 ms
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
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	CSA C22.2 No 14 UL 508 IEC 61810-1
Product certifications	UL Lloyd's CE CSA GOST 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 5 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles not operating
Shock resistance	10 gn for in operation 30 gn for not operating

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.8 cm
Package 1 Width	2.1 cm
Package 1 Length	2.7 cm
Package 1 Weight	36 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	393 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	9.928 kg

Contractual warranty

Warranty	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.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	30
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Environmental Disclosure	Product Environmental Profile
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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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EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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REACH Regulation	REACH Declaration
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China RoHS Regulation	China RoHS declaration
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Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
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WEEE



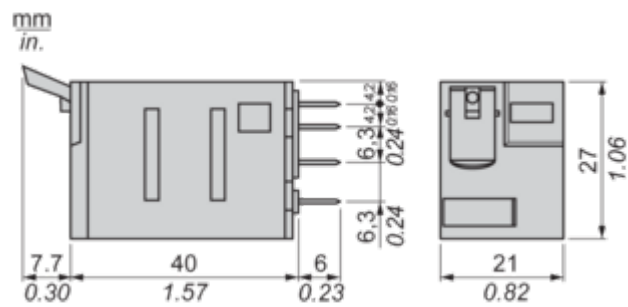
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Take-back

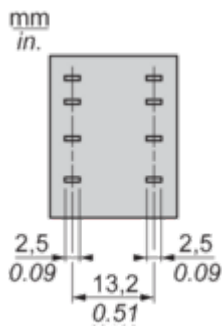
No

Dimensions Drawings

Dimensions

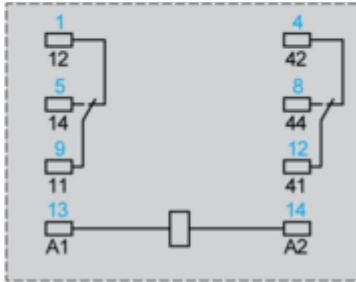
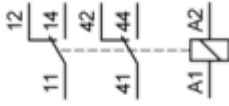


Pin Side View



Connections and Schema

Wiring Diagram

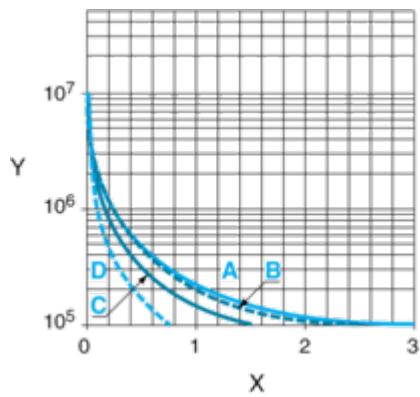


Symbols shown in blue correspond to Nema marking.

Performance Curves

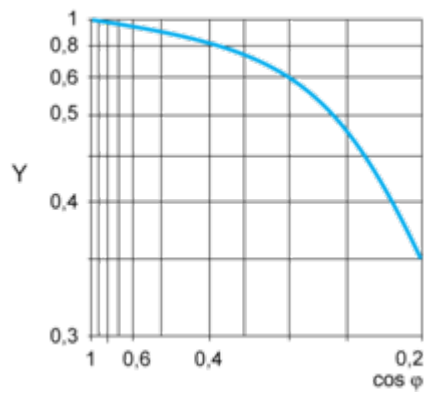
Electrical Durability of Contacts

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

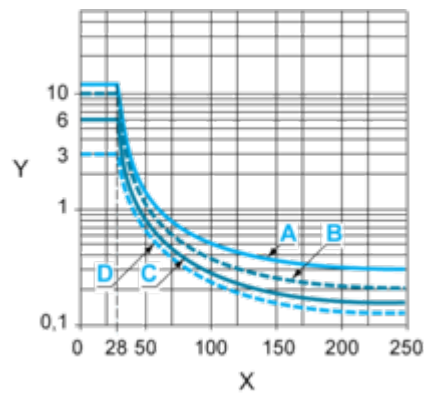


- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)
- A RXM2AB...
- B RXM3AB...
- C RXM4AB...
- D RXM4GB...

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...

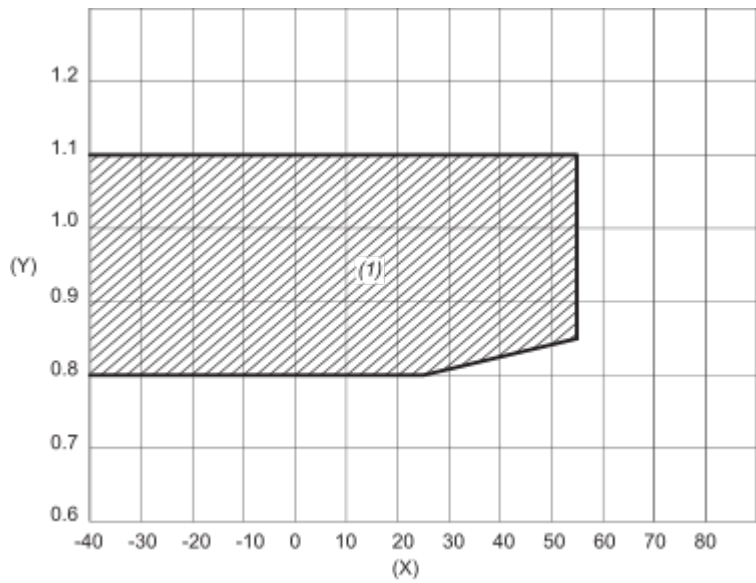
C RXM4AB...

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.

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

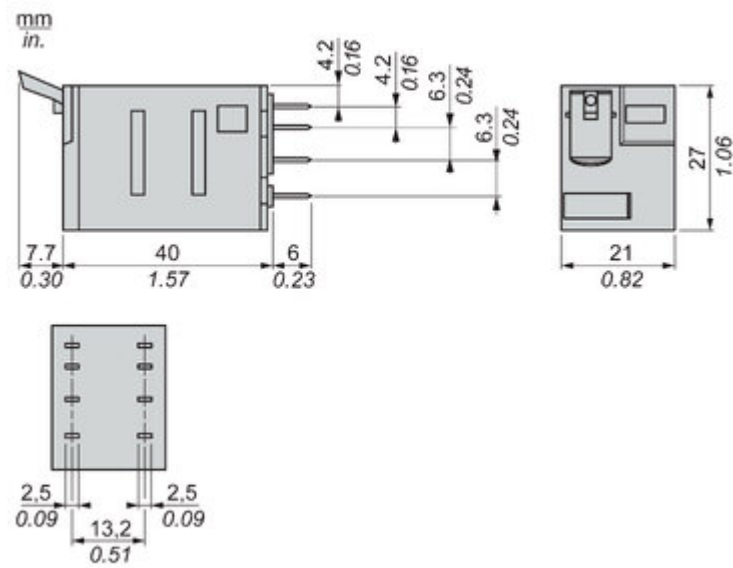
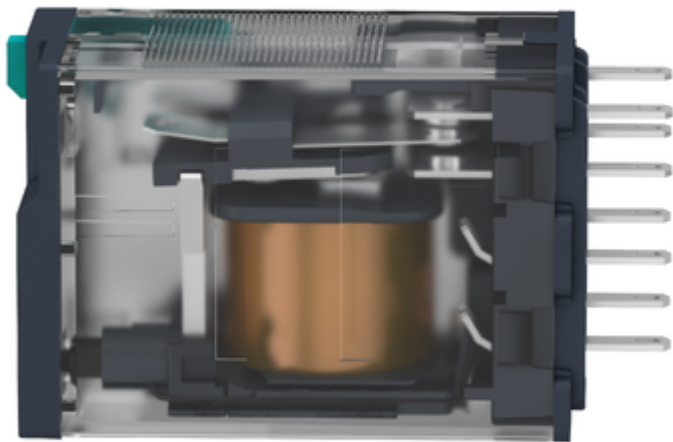
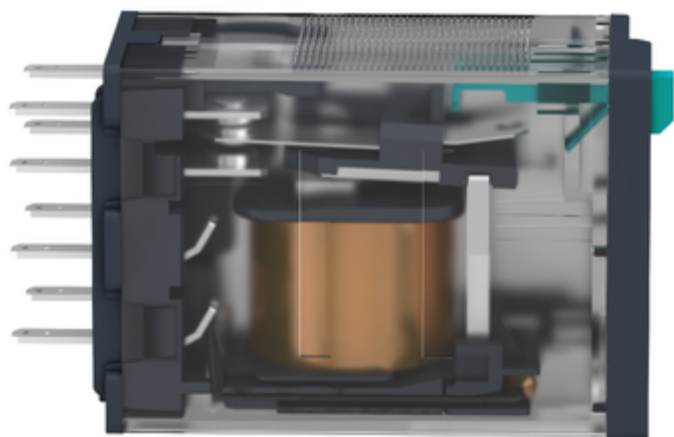


Image of product / Alternate images

Alternative





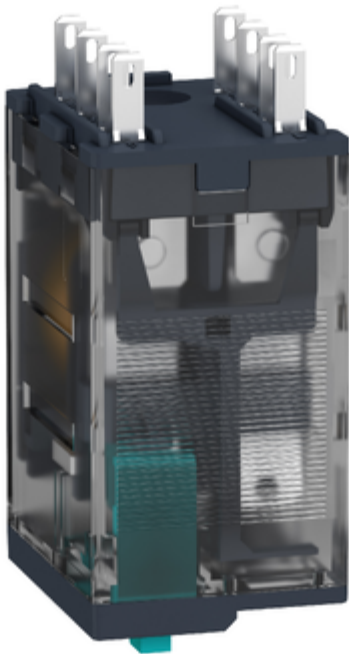


Image of product in real life situation

