

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	RXM series
Product or component type	Plug-in relay
Relay type	Miniature relay
Contacts type and composition	2 C/O
status LED	With
Control type	Lockable test button
[Uc] control circuit voltage	24 V DC
[Ithe] conventional enclosed thermal current	12 A
Continuous output current	10 A

Complementary

[Uimp] rated impulse withstand voltage	4 kV during 1.2/50 μ 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
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
Operating time	20 ms
Maximum switching capacity	3000 VA/336 W
Average resistance	650 Ohm at 20 °C +/- 10 %
Average coil consumption	0.9 W
Mechanical durability	10000000 cycles
Safety reliability data	B10d = 100000

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
Compatibility code	RXM
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 (faston type)
Product 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 IEC 61810-1 UL 508
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	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
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	9.994 kg

Contractual warranty

Warranty (in months)	18
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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

Total lifecycle Carbon footprint	16 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	0.3 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	16 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0 kg CO2 eq.
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	Compliant
REACH Regulation	Free of Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again

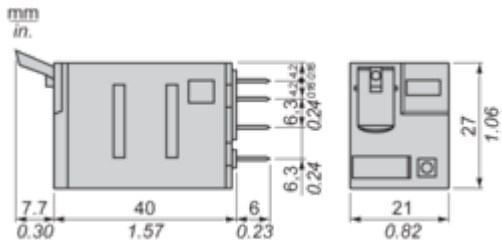


Repack and remanufacture

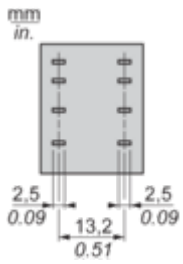
End of life manual availability	End of Life Information
Take-back	Nej

Dimensions Drawings

Dimensions

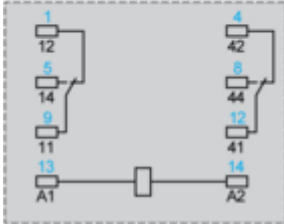


Pin Side View



Connections and Schema

Wiring Diagram



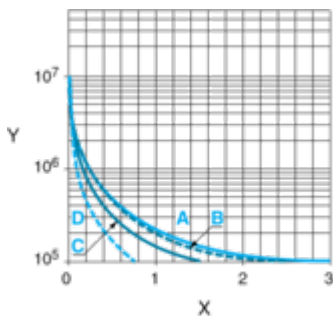
Symbols shown in blue correspond to Nema marking.

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)

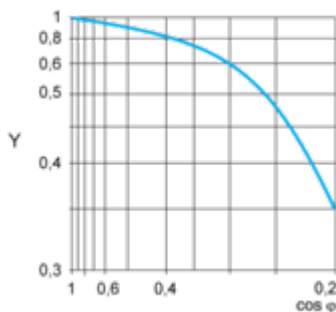
A RXM2AB...

B RXM3AB...

C RXM4AB...

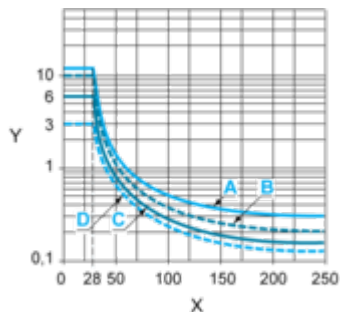
D RXM4GB...

Reduction coefficient for inductive AC load (depending on power factor $\cos \phi$)



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...

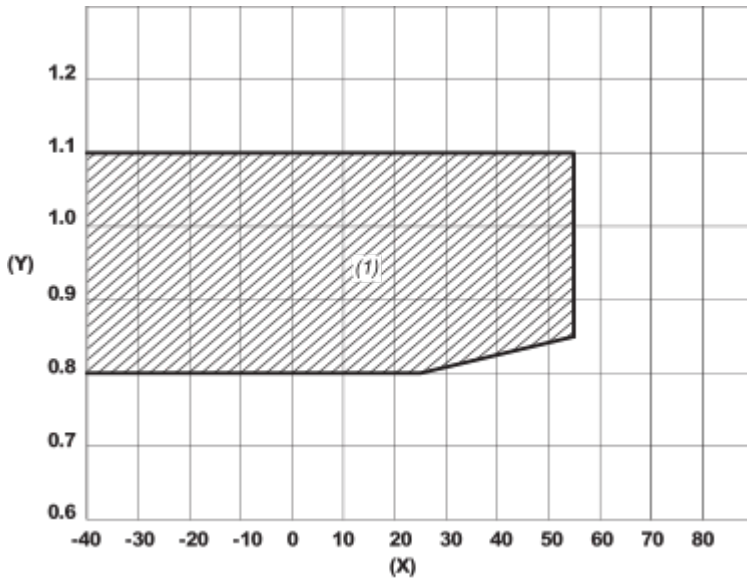
Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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

DC Coil Operating Range VS Ambient Temperature



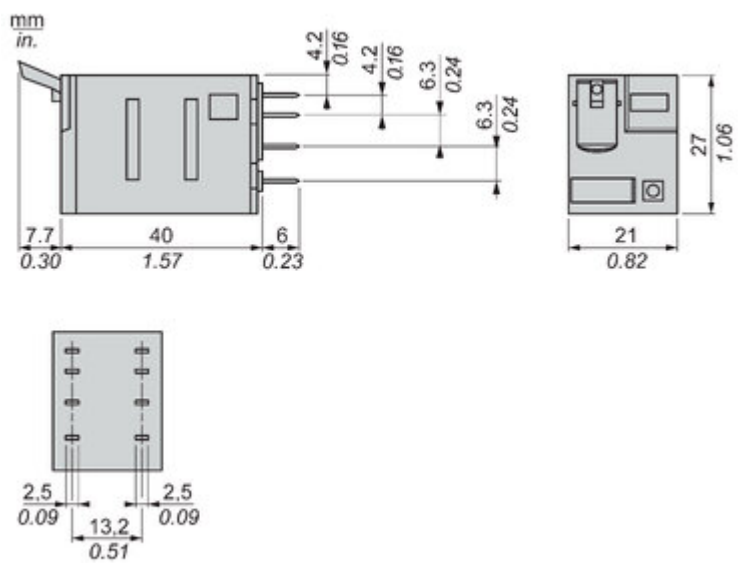
X : Ambient temperature (°C)

Y : AC coil voltage (U/Uc)

(1) Permitted operating range area

Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony RXMAB Relay

RXM*AB sockets:

- Mixed or separate contact arrangement
- Push-in, screw clamp or screw connector terminal

Plastic or metal maintaining clamp to protect against vibration

RXM*AB relays:

- 2CO-12A, 3CO-10A, 4CO-6A
- 12-220VDC, 24-240VAC

Push button (Blue for DC, Red for AC) and lockable test button for contact testing

Mechanical indicator for relay contact status

"Power On" LED for relay status



Offer Marketing Illustration

Product benefits / Features

Features

Harmony RXMAB Relay



Pluggable relay module for easy replacement and retrofitting of relays



Conforms to international standards: IEC, CE, UL, CSA, EAC, Lloyd's, RoHS and REACH





Save time and cost with pre-assembled relays and push-in sockets



Add-on protection modules and timer relay for flexibility

Image of product / Alternate images

Alternative

