

Product data sheet

Specifications



miniature plug in relay, Harmony Electromechanical Relays, 12A, 2CO, without LED, with lockable test button, flat (faston type), 48V DC

RXM2AB1ED

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	Without
Control type	Lockable test button
[Uc] control circuit voltage	48 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	38.4...52.8 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	2560 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)
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 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	1.100 cm
Package 1 Width	2.200 cm
Package 1 Length	5.000 cm
Package 1 Weight	35.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.000 cm
Package 2 Width	10.200 cm
Package 2 Length	12.500 cm

Package 2 Weight	379.000 g
Unit Type of Package 3	S01
Number of Units in Package 3	120
Package 3 Height	15.000 cm
Package 3 Width	15.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	4.888 kg

Contractual warranty

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



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 15

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](#) Pro-active compliance (Product out of EU RoHS legal scope)

REACH Regulation [REACH Declaration](#)

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

Use Again

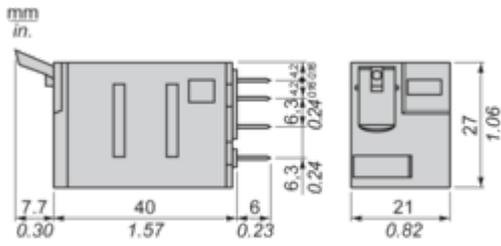
Repack and remanufacture

End of life manual availability [End of Life Information](#)

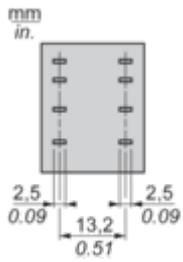
Take-back No

Dimensions Drawings

Dimensions

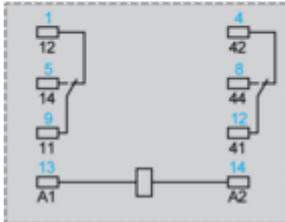


Pin Side View



Connections and Schema

Wiring Diagram



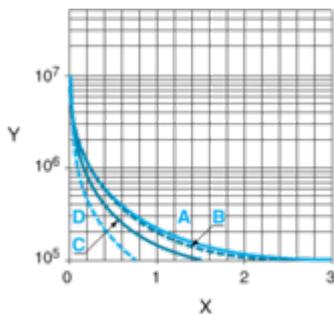
Symbols shown in blue correspond to Nema marking.

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)

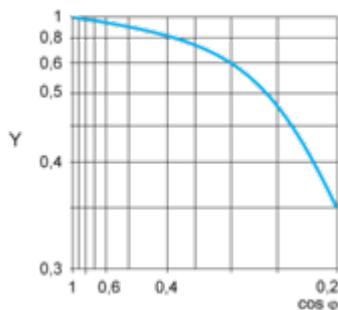
A RXM2AB...

B RXM3AB...

C RXM4AB...

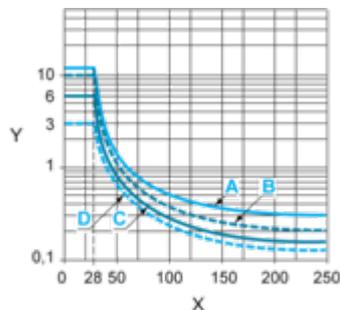
D RXM4GB...

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



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...

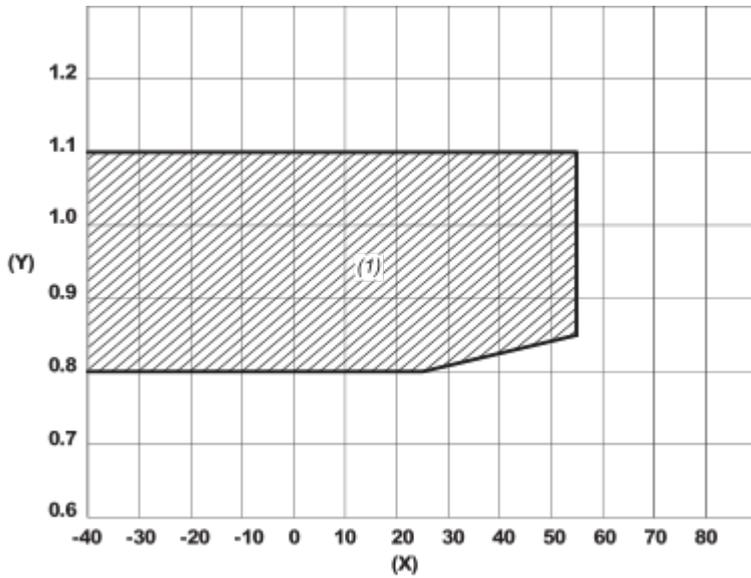
Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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

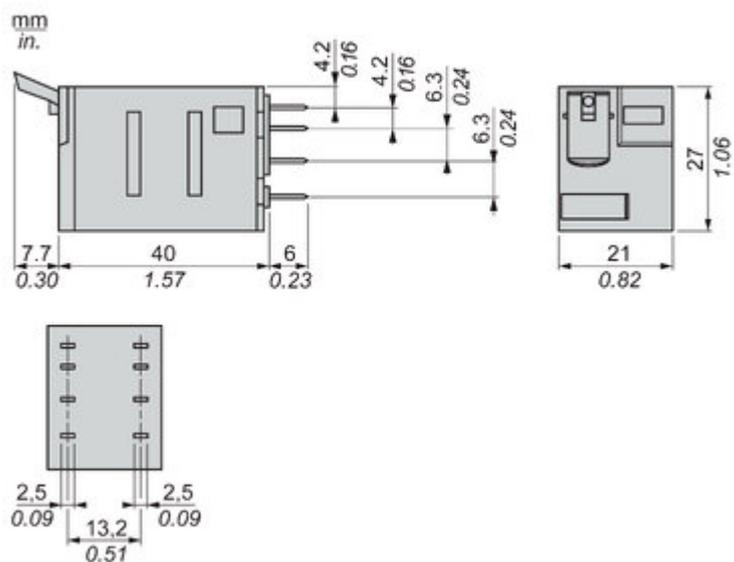


Image of product / Alternate images

Alternative

