Product datasheet

Specifications



Miniature plug-in relay, 10 A, 3 CO, 12 V DC

Local distributor code:

389837570 RXM3AB1JD

EAN Code: 3389119403603

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	3 C/O
status LED	Without
Control type	Lockable test button
[Uc] control circuit voltage	12 V DC
[Ithe] conventional enclosed thermal current	10 A
Continuous output current	6.7 A

Complementary

[Uimp] rated impulse withstand voltage	4 kV during 1.2/50 µs
[Ie] rated operational current	10 A at 28 V (DC) NO conforming to IEC 10 A at 250 V (AC) NO conforming to IEC 5 A at 28 V (DC) NC conforming to IEC 5 A at 250 V (AC) NC conforming to IEC 10 A at 30 V (DC) conforming to UL 10 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	9.6...13.2 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	10 A at 250 V AC 10 A at 28 V DC
Operating time	20 ms
Maximum switching capacity	2500 VA/280 W
Average resistance	160 Ohm at 20 °C +/- 10 %
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 %
CAD overall height	79 mm
CAD overall depth	78.45 mm
Reset time	20 ms
Dielectric strength	1300 V AC between contacts with micro disconnection 2000 V AC between coil and contact 2000 V AC between poles
Compatibility code	RXM
Protection category	RT I
Pollution degree	2
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	IEC 61810-1 CSA C22.2 No 14 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	4.1 cm
Package 1 Width	2.1 cm
Package 1 Length	2.8 cm
Package 1 Weight	39 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.1 cm

Package 2 Width	10.3 cm
Package 2 Length	12.5 cm
Package 2 Weight	400 g
Unit Type of Package 3	S01
Number of Units in Package 3	120
Package 3 Height	15 cm
Package 3 Width	15 cm
Package 3 Length	40 cm
Package 3 Weight	5.06 kg

Logistical informations

Country of origin	CN

Contractual warranty

Warranty (in months)	18

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**

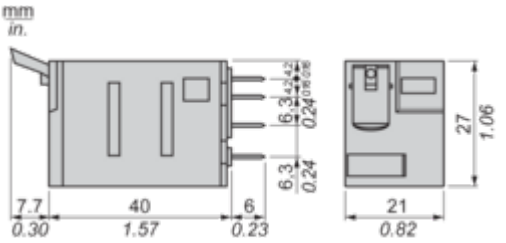
Use Again

Repack and remanufacture

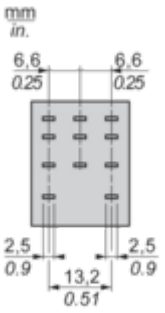
Recyclability potential, in %	**55**
End of life manual availability	**End of Life Information**
Take-back	**No**

Dimensions Drawings

Dimensions

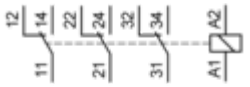


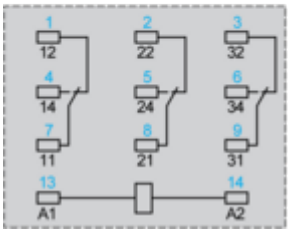
Pin Side View



Connections and Schema

Wiring Diagram



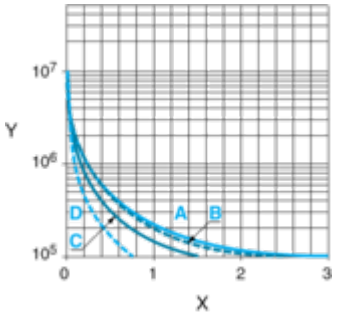


Symbols shown in blue correspond to Nema marking.

Performance Curves

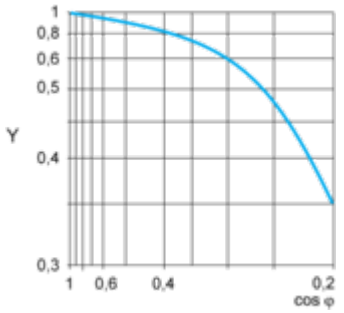
Electrical Durability of Contacts

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



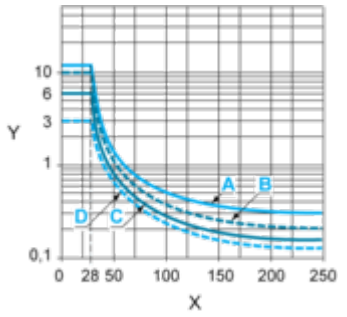
X Switching capacity (kVA)
Y Durability (Number of operating cycles)
A RXM2AB•••
B RXM3AB•••
C RXM4AB•••
D RXM4GB•••

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



Y Reduction coefficient (A)

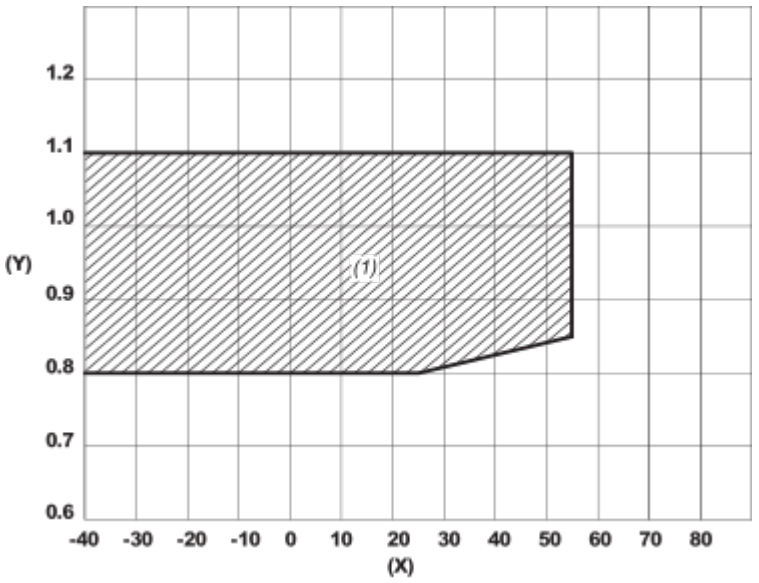
Maximum switching capacity on resistive DC load



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 : DC Coil voltage (U/Uc)
(1) : Permitted operating range area

Image of product / Alternate images

Alternative



