Product datasheet

Specifications

Miniature plug-in relay, 12 A, 2 CO, LED, 230 V AC

RXM2AB2P7

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	230 V AC 50/60 Hz
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 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
average coil consumption in VA	1.2 at 60 Hz
Average consumption	1.2 VA at 60 Hz
operate time	20 ms
average coil resistance	15000 Ohm at 20 °C +/- 15 %
Rated operational voltage limits	184...253 V AC
[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	>= 0.15 Uc
Load current	12 A at 250 V AC 12 A at 28 V DC
Maximum switching capacity	3000 VA/336 W
CAD overall height	82.8 mm
CAD overall depth	80.35 mm

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
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	IEC 61810-1 UL 508 CSA C22.2 No 14
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	2.6 cm
Package 1 Width	2.0 cm
Package 1 Length	5.0 cm
Package 1 Weight	35.0 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.0 cm
Package 2 Width	10.2 cm

Package 2 Length	12.5 cm
Package 2 Weight	386.0 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	9.734 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.

How this information helps you

Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	**38**
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**
China RoHS Regulation	**China RoHS declaration**

Use Again

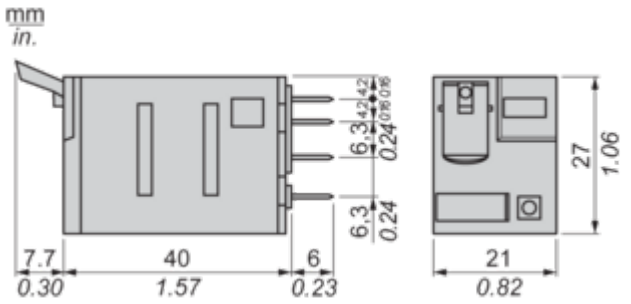
Repack and remanufacture

Circularity Profile	**End of Life Information**

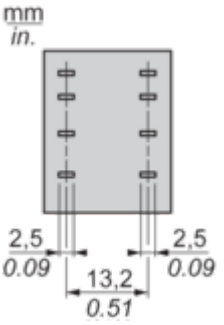
WEEE	 **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**
Take-back	**No**

Dimensions Drawings

Dimensions

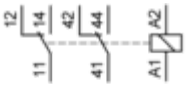


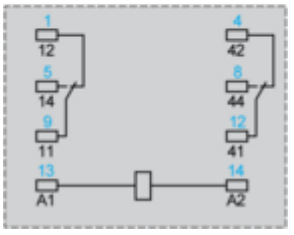
Pin Side View



Connections and Schema

Wiring Diagram



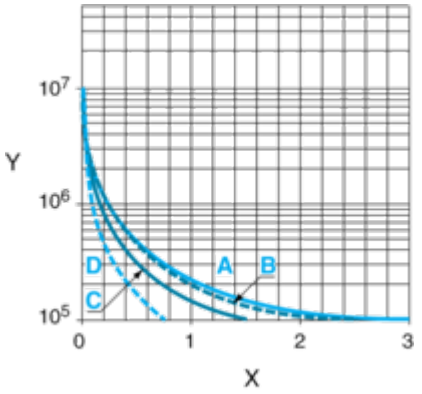


Symbols shown in blue correspond to Nema marking.

Performance Curves

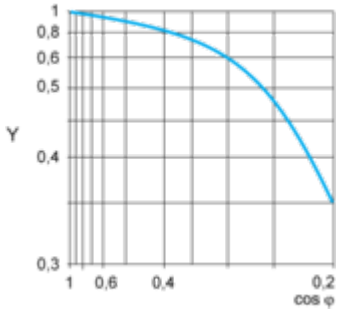
Electrical Durability of Contacts

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



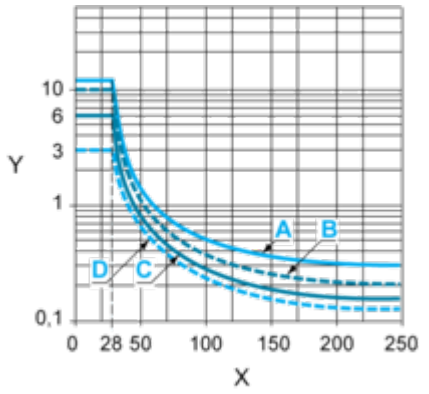
X Switching capacity (kVA)
Y Durability (Number of operating cycles)
A RXM2AB•••
B RXM3AB•••
C RXM4AB•••
D RXM4GB•••

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



Y Reduction coefficient (A)

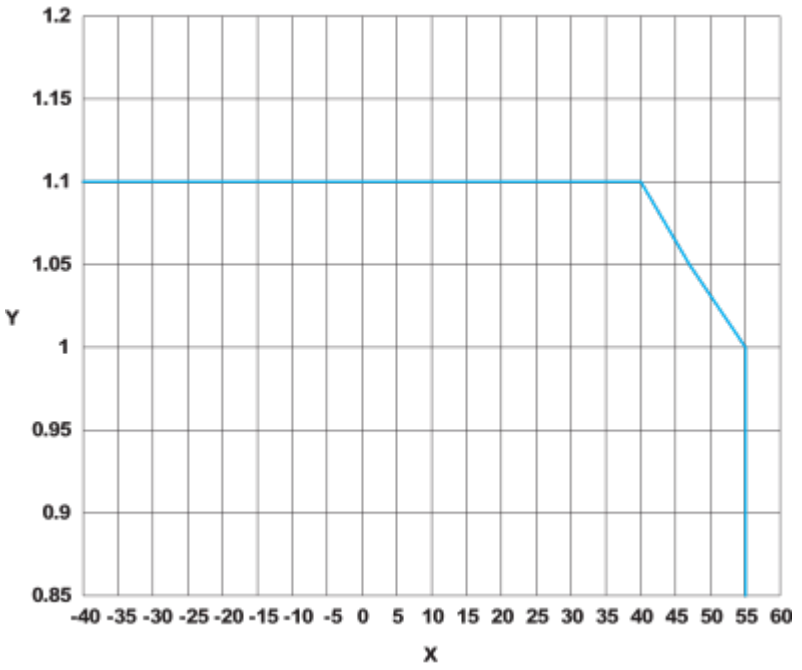
Maximum switching capacity on resistive DC load



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.

AC Coil Voltage and Operating Temperature under continuous duty



X : Operating temperature (°C)
Y : AC coil voltage (UC)

Technical Illustration

Dimensions

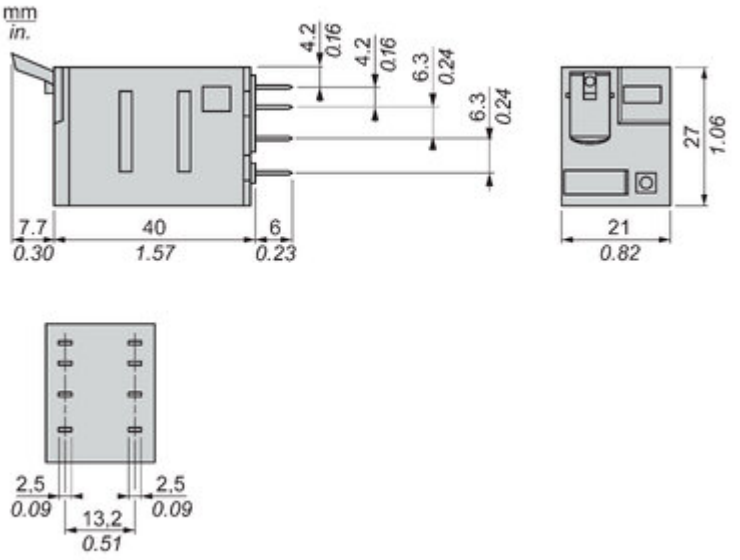
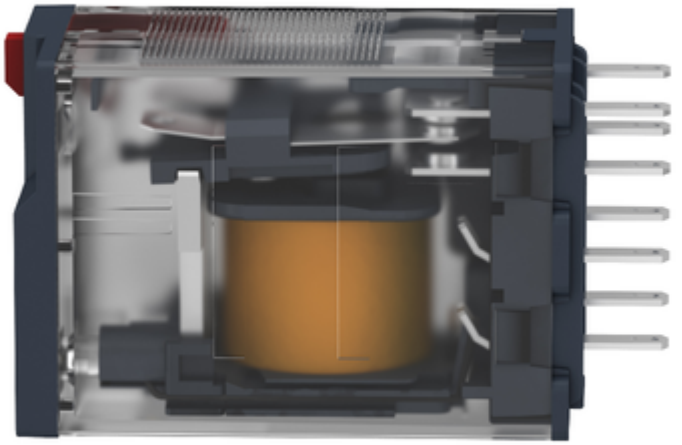
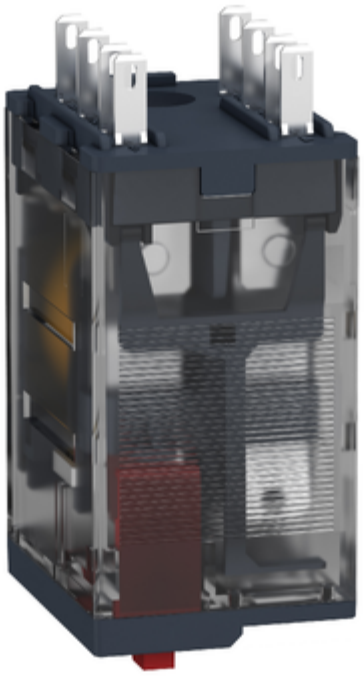
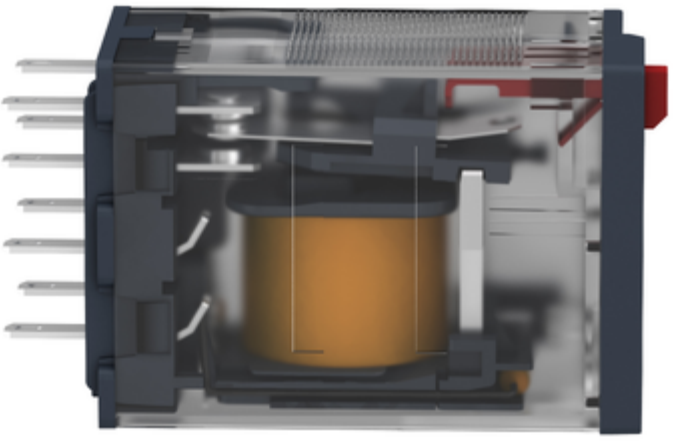


Image of product / Alternate images

Alternative







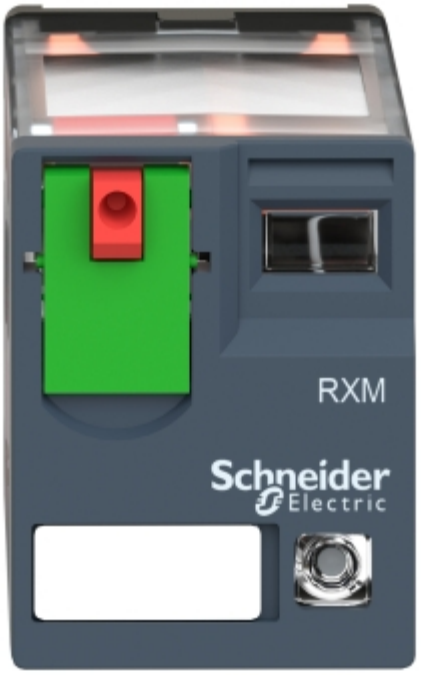

RXM
Schneider
Electric

Image of product in real life situation