Specifications



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

RXM2AB2JD

## 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	12 V DC
Status LED	With
Control type	Lockable test button
Continuous output current	10 A

# Complementary

oomprementary	
[Uimp] rated impulse withstand voltage	4 kV during 1.2/50 μs
[le] 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	160 Ohm at 20 °C +/- 10 %
Rated operational voltage limits	9.613.2 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	12 A at 250 V AC 12 A at 28 V DC
Maximum switching capacity	3000 VA/336 W
CAD overall height	79 mm
CAD overall depth	78.45 mm
Average coil consumption	0.9 W
Mechanical durability	1000000 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	-4055 °C	
IP degree of protection	IP40 conforming to IEC 60529	
Standards	UL 508 CSA C22.2 No 14 IEC 61810-1	
Product certifications	UL Lloyd's CE CSA GOST IECEE CB Scheme	
Ambient air temperature for storage	-4085 °C	
Vibration resistance	3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation 5 gn, amplitude = +/- 1 mm (f = 10150 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	6.800 cm
Package 1 Width	2.100 cm
Package 1 Length	2.720 cm
Package 1 Weight	36.000 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	393.000 g
Unit Type of Package 3	S02
Number of Units in Package 3	240
Package 3 Height	15.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	10.056 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 >

earrow  ear	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	16
Environmental Disclosure	Product Environmental Profile

# **Use Better**

S 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	<b>REACh Declaration</b>
China RoHS Regulation	China RoHS declaration

## **Use Again**

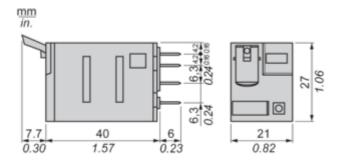
$\circlearrowright$ Repack and remanufacture	
Circularity Profile	End of Life Information

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

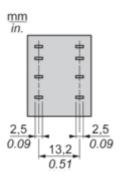
 Take-back
 No

#### **Dimensions Drawings**

#### Dimensions

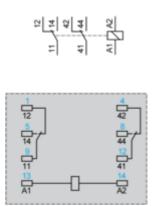


Pin Side View



Connections and Schema

#### Wiring Diagram

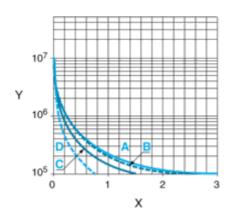


Symbols shown in blue correspond to Nema marking.

#### Performance Curves

#### **Electrical Durability of Contacts**

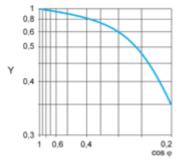
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

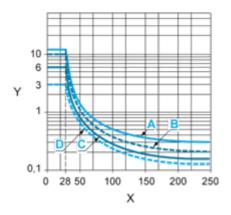
- Y Durability (Number of operating cycles)
- A RXM2AB ····
- B RXM3AB...
- C RXM4AB•••
- D RXM4GB····

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



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···

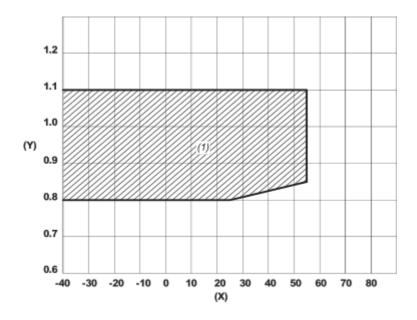
### RXM2AB2JD

**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



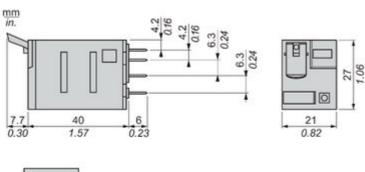
X : Ambient temperature (°C)

Y: AC coil voltage (U/Uc)

(1) Permitted operating range area

#### **Technical Illustration**

#### Dimensions



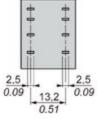
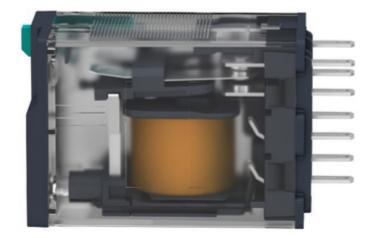


Image of product / Alternate images

Alternative







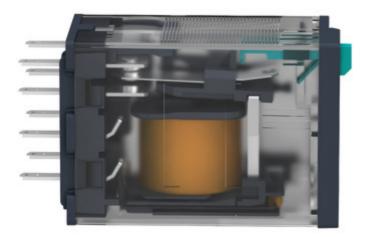






Image of product in real life situation



