# **Product datasheet**

Specification





# miniature plug in relay, Harmony Electromechanical Relays, 6A, 4CO, with LED, 24V DC

RXM4AB3BD

## 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	4 C/O
[Uc] Control Circuit Voltage	24 V DC
Status Led	With
Control Type	Without lockable test button
Utilisation Coefficient	20 %

# Complementary

J	
Shape Of Pin	Flat
[Ui] Rated Insulation Voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
[Uimp] Rated Impulse Withstand Voltage	2.5 kV during 1.2/50 μs
Contacts Material	AgNi
[le] Rated Operational Current	3 A at 28 V (DC) NC conforming to IEC 3 A at 250 V (AC) NC conforming to IEC 6 A at 28 V (DC) NO conforming to IEC 6 A at 250 V (AC) NO conforming to IEC 6 A at 277 V (AC) conforming to UL 8 A at 30 V (DC) conforming to UL
Continuous Output Current	5 A
Maximum Switching Voltage	250 V conforming to IEC
Resistive Rated Load	6 A at 250 V AC 6 A at 28 V DC
Maximum Switching Capacity	1500 VA/168 W
Minimum Switching Capacity	170 mW at 10 mA, 17 V
Operating Rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical Durability	10000000 cycles
Electrical Durability	100000 cycles for resistive load
Average Coil Consumption	0.9 W
Drop-Out Voltage Threshold	>= 0.1 Uc

Operate Time	20 ms	
Release Time	20 ms	
Average Coil Resistance	650 Ohm at 20 °C +/- 10 %	
Rated Operational Voltage Limits	19.226.4 V DC	
Safety Reliability Data	B10d = 100000	
Protection Category	RTI	
Test Levels	Level A group mounting	
Operating Position	Any position	
Net Weight	0.037 kg	
Device Presentation	Complete product	

# **Environment**

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
Product Certifications	UL
	Lloyd's
	CE
	CSA
	GOST
	IECEE CB Scheme
Standards	CSA C22.2 No 14
	IEC 61810-1
	UL 508
Ambient Air Temperature For Storage	-4085 °C
Ambient Air Temperature For Operation	-4055 °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
Ip Degree Of Protection	IP40 conforming to IEC 60529
Shock Resistance	10 gn for in operation
	30 gn for not operating
Pollution Degree	2

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.100 cm
Package 1 Width	2.700 cm
Package 1 Length	4.600 cm
Package 1 Weight	35.500 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	12.700 cm
Package 2 Weight	385.000 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	9.695 kg

# **Contractual warranty**

Warranty 18 months

# Sustainability Green Premium

Green Premium<sup>TM</sup> label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

# Well-being performance



Rohs Exemption Information

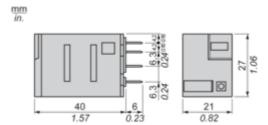
Yes

## **Certifications & Standards**

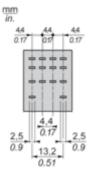
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

# **Dimensions Drawings**

## **Dimensions**



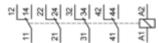
#### Pin Side View

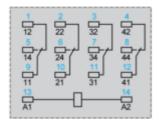


### RXM4AB3BD

Connections and Schema

## Wiring Diagram





Symbols shown in blue correspond to Nema marking.

### **Product datasheet**

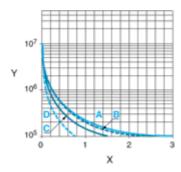
#### RXM4AB3BD

#### 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)

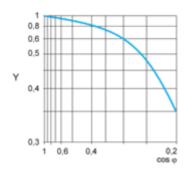
A RXM2AB\*\*\*

B RXM3AB\*\*\*

C RXM4AB\*\*\*

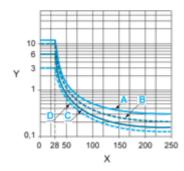
D RXM4GB•••

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



#### 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•••

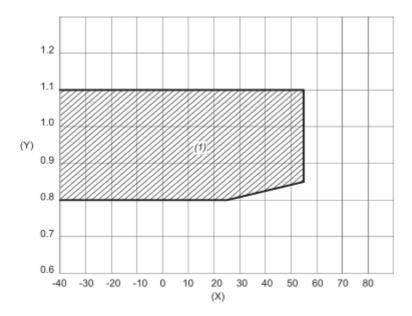
Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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**



 ${\bf X}$  : Ambient temperature (°C)

Y: AC coil voltage (U/Uc)

(1) Permitted operating range area