

# miniature plug in relay, Harmony Electromechanical Relays, 10A, 3CO, lockable test but to n, 24V AC

RXM3AB1B7

### 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	3 C/O
[Uc] Control Circuit Voltage	24 V AC 50/60 Hz
Status Led	Without
Control Type	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	4 kV during 1.2/50 μs
Contacts Material	AgNi
[le] 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
Continuous Output Current	6.7 A
Maximum Switching Voltage	250 V conforming to IEC
Resistive Rated Load	10 A at 250 V AC 10 A at 28 V DC
Maximum Switching Capacity	2500 VA/280 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 In Va	1.2 at 60 Hz
Average Consumption	1.2 VA at 60 Hz

Drop-Out Voltage Threshold	>= 0.15 Uc
Operate Time	20 ms
Release Time	20 ms
Average Coil Resistance	180 Ohm at 20 °C +/- 15 %
Rated Operational Voltage Limits	19.226.4 V AC
Safety Reliability Data	B10d = 100000
Protection Category	RTI
Test Levels	Level A group mounting
Operating Position	Any position
Cad Overall Height	79 mm
Cad Overall Depth	78.45 mm
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
	2000 V AC between poles
Product Certifications	UL
	Lloyd's
	CE
	CSA
	GOST
	IECEE CB Scheme
Standards	IEC 61810-1
	UL 508
	CSA C22.2 No 14
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	3.1 cm
Package 1 Width	10.3 cm
Package 1 Length	12.5 cm
Package 1 Weight	36 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	395 g
Unit Type Of Package 3	S02
Number Of Units In Package 3	240
Package 3 Height	15 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	9.993 kg

# **Contractual warranty**

Warranty 18 months

## Sustainability

**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-CO<sub>2</sub> 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



Reach Free Of Svhc



Rohs Exemption Information

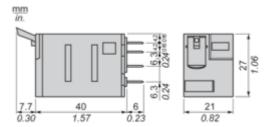
Yes

#### **Certifications & Standards**

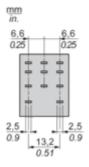
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following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

### **Dimensions Drawings**

### **Dimensions**



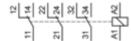
#### Pin Side View

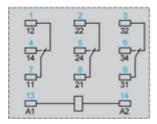


### RXM3AB1B7

Connections and Schema

### Wiring Diagram





Symbols shown in blue correspond to Nema marking.

#### Product data sheet

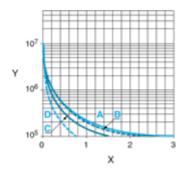
#### RXM3AB1B7

#### 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)

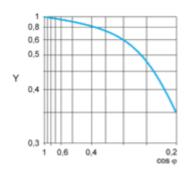
A RXM2AB\*\*\*

B RXM3AB\*\*\*

C RXM4AB\*\*\*

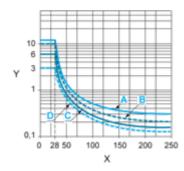
D RXM4GB•••

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•••

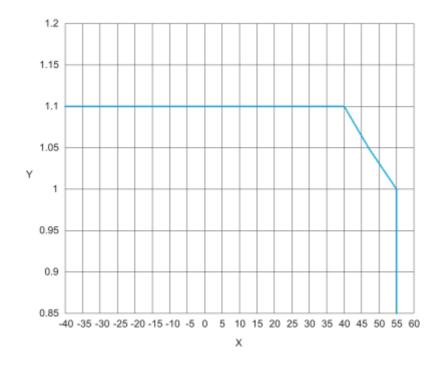
**D** RXM4GB•••

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.

AC Coil Voltage and Operating Temperature under continuous duty



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