# **Product datasheet**

Specification





miniature plug in relay, Harmony Electromechanical Relays, 12A, 2CO, with LED, lockable test but to n, 48V AC

RXM2AB2E7

#### 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	48 V AC 50/60 Hz
Status Led	With
Control Type	Lockable test button
Utilisation Coefficient	20 %

## Complementary

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	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
Continuous Output Current	10 A
Maximum Switching Voltage	250 V conforming to IEC
Resistive Rated Load	12 A at 250 V AC 12 A at 28 V DC
Maximum Switching Capacity	3000 VA/336 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	710 Ohm at 20 °C +/- 15 %	
Rated Operational Voltage Limits	38.452.8 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 with basic insulation 2000 V AC between poles with basic insulation
Product Certifications	UL CSA CE GOST Lloyd's
Standards	UL 508 IEC 61810-1 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	3

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	4.7 cm
Package 1 Width	2.1 cm
Package 1 Length	2.7 cm
Package 1 Weight	37.0 g
Unit Type Of Package 2	BB1
Number Of Units In Package 2	10
Package 2 Height	3.0 cm
Package 2 Width	10.1 cm

Package 2 Length	12.5 cm
Package 2 Weight	399.0 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	9.91 kg

## **Contractual warranty**

Warranty 18 months



**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

<b>②</b>	Reach Free Of Svhc	
<b>9</b>	Toxic Heavy Metal Free	
<b>②</b>	Mercury Free	
<b>⊘</b>	Rohs Exemption Information	Yes

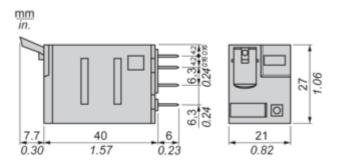
### **Certifications & Standards**

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

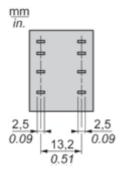
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**Dimensions Drawings** 

#### **Dimensions**



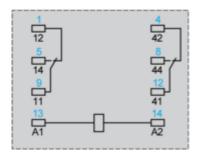
Pin Side View



Connections and Schema

#### Wiring Diagram

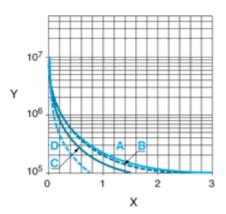




Symbols shown in blue correspond to Nema marking.

#### **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)

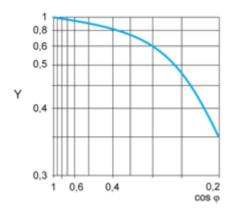
A RXM2AB\*\*\*

B RXM3AB•••

C RXM4AB•••

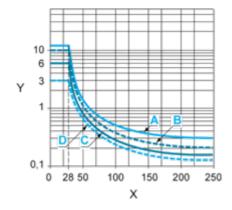
D RXM4GB•••

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•••

## **Product datasheet**

#### RXM2AB2E7

#### D RXM4GB•••

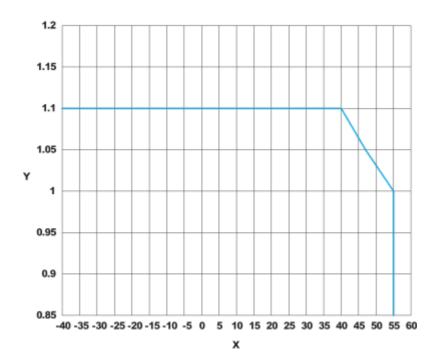
Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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.

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AC Coil Voltage and Operating Temperature under continuous duty



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