# RXM2AB1F7

miniature plug in relay, Harmony Electromechanical Relays, 12A, 2CO, lockable test but to n, 120V AC





#### 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	120 V AC 50/60 Hz
Status LED	Without
Control type	Lockable test button
Utilisation coefficient	20 %

### Complementary

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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 28 V (BC) 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	4430 Ohm at 20 °C +/- 15 %
Rated operational voltage limits	96132 V AC
Safety reliability data	B10d = 100000
Protection category	RTI
Test levels	Level A group mounting
Operating position	Any position

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not interested for a set of or determining suitability or intelability of these products for specific user applications. It is the documentation is not integrator to perform the appropriate and complete risk analysis, evaluating of the products with respect to the relevant specific application or use thereof. Neither Schmeider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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[RETURN]Lloyd's[RETURN]CE[RETURN]CSA[RETURN]GOST[RETURN]IECEECB Scheme
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**

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.1 cm
Package 1 Width	2.1 cm
Package 1 Length	2.72 cm
Package 1 Weight	37 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3 cm
Package 2 Width	10.2 cm
Package 2 Length	12.5 cm
Package 2 Weight	382 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	9.643 kg

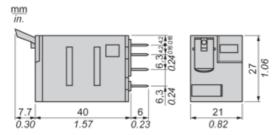
# Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	₫Yes
Environmental Disclosure	Product Environmental Profile
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

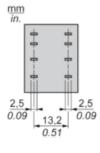
Warranty 18 months

# RXM2AB1F7

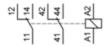
### **Dimensions**

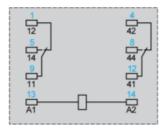


Pin Side View



# Wiring Diagram





Symbols shown in blue correspond to Nema marking.

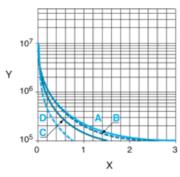
# Product data sheet Performance Curves

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### **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)

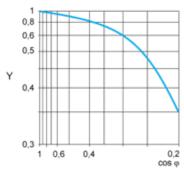
A RXM2AB•••

B RXM3AB•••

C RXM4AB\*\*\*

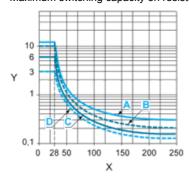
D RXM4GB•••

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•••

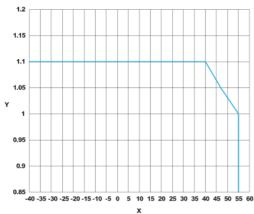
D RXM4GB•••

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)