Miniature plug in relay, Harmony, 12A, 2CO, with LED, lockable test button, 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

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 EN/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 EN/IEC 60529
Shock resistance	
onosk rosistanos	10 gn for in operation 30 gn for not operating
Pollution degree	
	30 gn for not operating
Pollution degree	30 gn for not operating
Pollution degree Packing Units	30 gn for not operating 3
Pollution degree  Packing Units  Unit Type of Package 1	30 gn for not operating  3  PCE
Pollution degree  Packing Units  Unit Type of Package 1  Number of Units in Package 1	30 gn for not operating  PCE  1
Pollution degree  Packing Units  Unit Type of Package 1  Number of Units in Package 1  Package 1 Height	30 gn for not operating  3 PCE  1 4.7 cm
Pollution degree  Packing Units  Unit Type of Package 1  Number of Units in Package 1  Package 1 Height  Package 1 Width	30 gn for not operating  PCE  1  4.7 cm  2.1 cm
Pollution degree  Packing Units  Unit Type of Package 1  Number of Units in Package 1  Package 1 Height  Package 1 Width  Package 1 Length	30 gn for not operating  PCE  1  4.7 cm  2.1 cm
Pollution degree  Packing Units  Unit Type of Package 1  Number of Units in Package 1  Package 1 Height  Package 1 Width  Package 1 Length  Package 1 Weight	30 gn for not operating  3  PCE  1  4.7 cm  2.1 cm  2.7 cm  37.0 g
Pollution degree  Packing Units  Unit Type of Package 1  Number of Units in Package 1  Package 1 Height  Package 1 Width  Package 1 Length  Package 1 Weight  Unit Type of Package 2	30 gn for not operating  3  PCE  1  4.7 cm  2.1 cm  2.7 cm  37.0 g  BB1
Pollution degree  Packing Units  Unit Type of Package 1  Number of Units in Package 1  Package 1 Height  Package 1 Width  Package 1 Length  Package 1 Weight  Unit Type of Package 2  Number of Units in Package 2	30 gn for not operating  PCE  1  4.7 cm  2.1 cm  2.7 cm  37.0 g  BB1

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
Offer Sustainability	
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration

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) EU RoHS Declaration
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
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

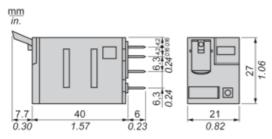
# Contractual warranty

Warranty 18 months

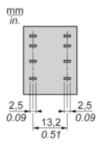
# RXM2AB2E7

**Dimensions Drawings** 

#### **Dimensions**



Pin Side View

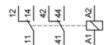


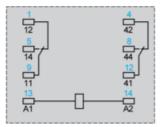
# **Product data sheet**

# RXM2AB2E7

Connections and Schema

### Wiring Diagram





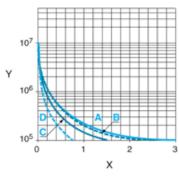
Symbols shown in blue correspond to Nema marking.

**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)

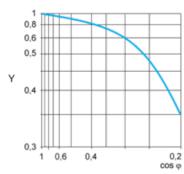
A RXM2AB•••

B RXM3AB•••

C RXM4AB•••

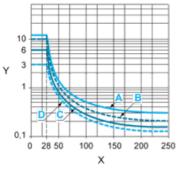
D RXM4GB•••

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



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC

Y Current DC

A RXM2AB•••

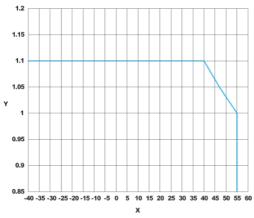
**B** RXM3AB•••

C RXM4AB•••

**D** RXM4GB•••

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

AC Coil Voltage and Operating Temperature under continuous duty



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

Y: AC coil voltage (UC)

#### Recommended replacement(s)