# Disclaimer. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications



# Miniature Plug-in relay - Harmony RXM 4 C/O 110 V DC 6 A with LED

RXM4AB2FD

### Main

Range of product	Harmony Electromechanical Relays
Series name	RXM series
Product or component type	Plug-in relay
Relay type	Miniature relay
Contacts type and composition	4 C/O
Status LED	With
Control type	Lockable test button
[Uc] control circuit voltage	110 V DC
[Ithe] conventional enclosed thermal current	6 A
Continuous output current	5 A

### Complementary

Complementary	
[Uimp] rated impulse withstand voltage	2.5 kV during 1.2/50 μs
[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
Minimum switching capacity	170 mW at 10 mA, 17 V
Electrical durability	100000 cycles for resistive load
Rated operational voltage limits	88121 V DC
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
Maximum switching voltage	250 V conforming to IEC
Drop-out voltage threshold	>= 0.1 Uc
Load current	6 A at 250 V AC 6 A at 28 V DC
Operating time	20 ms
Maximum switching capacity	1500 VA/168 W
Average resistance	13440 Ohm at 20 °C +/- 10 %
Average coil consumption	0.9 W
Mechanical durability	10000000 cycles
Safety reliability data	B10d = 100000

Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Utilisation coefficient	20 %
CAD overall height	79 mm
CAD overall depth	78.45 mm
Reset time	20 ms
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
Compatibility code	RXM
Protection category	RTI
pollution degree	2
Operating position	Any position
Test levels	Level A group mounting
Device presentation	Complete product
Contacts material	AgNi
Shape of pin	Flat (faston type)
Net weight	0.037 kg

### **Environment**

Ambient air temperature for operation	-4055 °C	
IP degree of protection	IP40 conforming to IEC 60529	
Standards	CSA C22.2 No 14 UL 508 IEC 61810-1	
Product certifications	UL Lloyd's CE CSA GOST IECEE CB Scheme	
Ambient air temperature for storage	-4085 °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	
Shock resistance	10 gn for in operation 30 gn for not operating	

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.300 cm
Package 1 Width	2.900 cm
Package 1 Length	5.000 cm
Package 1 Weight	37.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.400 cm

Package 2 Width	10.500 cm
Package 2 Length	12.800 cm
Package 2 Weight	398.000 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	10.016 kg

# **Contractual warranty**

Warranty 12 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

### Environmental Data explained >

How we assess product sustainability >

∇ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	18
Environmental Disclosure	Product Environmental Profile

### **Use Better**

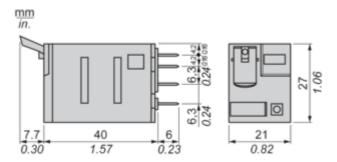
Materials and Packaging	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACh Regulation	REACh Declaration

### **Use Again**

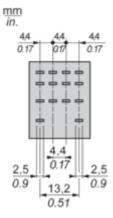
○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

### **Dimensions Drawings**

### **Dimensions**



Pin Side View

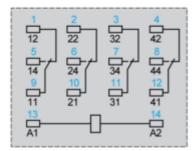


### RXM4AB2FD

Connections and Schema

### Wiring Diagram



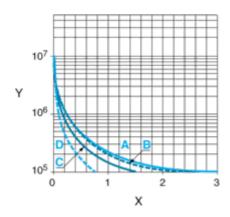


Symbols shown in blue correspond to Nema marking.

### 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)

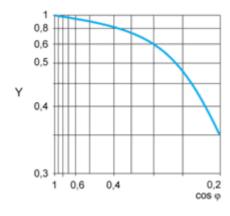
A RXM2AB ···

B RXM3AB\*\*\*

C RXM4AB•••

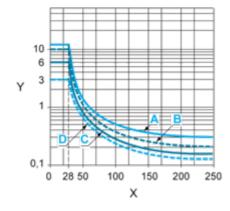
D RXM4GB\*\*\*

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



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



Y Current DC

A RXM2AB\*\*\*

### **Product datasheet**

### RXM4AB2FD

B RXM3AB\*\*\*

C RXM4AB\*\*\*

D RXM4GB\*\*\*

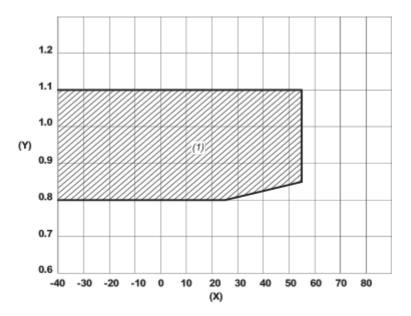
Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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**



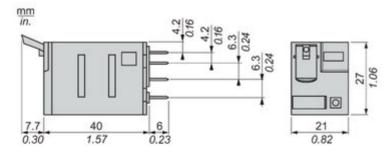
 $\mathbf{X}$ : Ambient temperature (°C)

Y: AC coil voltage (U/Uc)

(1) Permitted operating range area

### **Technical Illustration**

### **Dimensions**



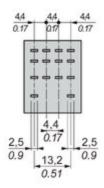
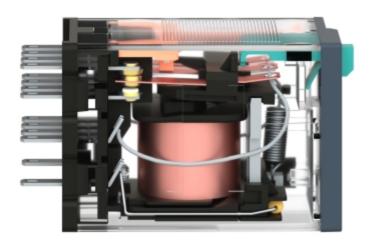


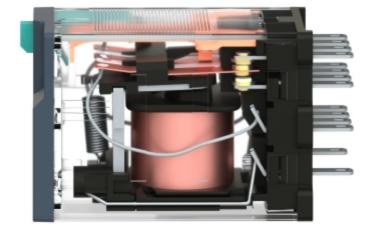
Image of product / Alternate images

### **Alternative**













13