## Product data sheet Characteristics

# RXM2AB1BD

Harmony, Miniature plug-in relay, 12 A, 2 CO, with lockable test button, 24 V DC





#### Main

Wall	
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	24 V DC
[Ithe] conventional enclosed thermal current	12 A at -40…55 °C
Status LED	Without
Control type	Lockable test button
Utilisation coefficient	20 %

## Complementary

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	24 V DC	
[Ithe] conventional enclosed thermal current	12 A at -4055 °C	
Status LED	Without	
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	
	250 V conforming to IEC	
Maximum switching voltage		
Maximum switching voltage Resistive rated load	12 A at 250 V AC 12 A at 28 V DC	



Minimum switching capacity	170 mW at 10 mA, 17 V
Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical durability	1000000 cycles
Electrical durability	100000 cycles for resistive load
Average coil consumption in W	0.9 W
Drop-out voltage threshold	>= 0.1 Uc
Operate time	20 ms
Release time	20 ms
Average coil resistance	650 Ohm at 20 °C +/- 10 %
Rated operational voltage limits	19.226.4 V DC
Safety reliability data	B10d = 100000
Protection category	RTI
Test levels	Level A group mounting
Operating position	Any position
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	GOST CSA UL Lloyd's CE
Standards	CSA C22.2 No 14 UL 508 EN/IEC 61810-1
Ambient air temperature for storage	-4085 °C
Ambient air temperature for operation	-4055 °C
Vibration resistance	3 gn, amplitude = +/- 1 mm (f = 10…150 Hz)5 cycles in operation 5 gn, amplitude = +/- 1 mm (f = 10…150 Hz)5 cycles not operating
IP degree of protection	IP40 conforming to EN/IEC 60529
Shock resistance	10 gn for in operation 30 gn for not operating
Pollution degree	3

## Packing Units

Package 1 Weight	34.000 g	
Package 1 Height	0.410 dm	
Package 1 width	0.210 dm	
Package 1 Length	0.280 dm	

## 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) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
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
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

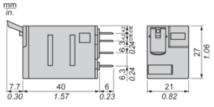
#### Contractual warranty

Warranty	18 months

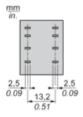
Product data sheet **Dimensions Drawings** 

# RXM2AB1BD

## Dimensions



Pin Side View

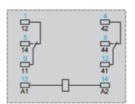




# RXM2AB1BD

## Wiring Diagram



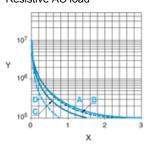


Symbols shown in blue correspond to Nema marking.

# RXM2AB1BD

### **Electrical Durability of Contacts**

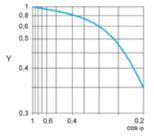
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

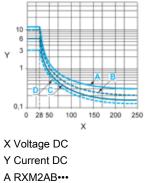
- Y Durability (Number of operating cycles)
- A RXM2AB •••
- B RXM3AB•••
- C RXM4AB ····
- D RXM4GB•••

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



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



- B RXM3AB•••
- C RXM4AB•••
- D RXM4GB•••

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