# Product data sheet Characteristics

# RXM2AB3BD

Miniature plug in relay, Harmony, 12A, 2CO, with LED, 24V DC





#### 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
Status LED	With
Control type	Without lockable test button
Utilisation coefficient	20 %

## Complementary

Complementary	
Shape of pin	Flat
[Ui] rated insulation voltage	250 V IEC
	300 V CSA
	300 V UL
[Uimp] rated impulse withstand voltage	4 kV 1.2/50 μs
Contacts material	AgNi
[le] rated operational current	12 A 28 V DC) NO IEC
	12 A 250 V AC) NO IEC
	6 A 28 V DC) NC IEC 6 A 250 V AC) NC IEC
	12 A 28 V DC) UL
	12 A 277 V AC) UL
Continuous output current	10 A
Maximum switching voltage	250 V IEC
Resistive rated load	12 A 250 V AC
	12 A 28 V DC
Maximum switching capacity	3000 VA/336 W
Minimum switching capacity	170 mW 10 mA, 17 V
Operating rate	<= 1200 cycles/hour under load
	<= 18000 cycles/hour no-load
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles resistive
Average coil consumption	0.9 W
Drop-out voltage threshold	>= 0.1 Uc
Operate time	20 ms
Release time	20 ms
Average coil resistance	650 Ohm 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
CAD overall height	3.26 in (82.8 mm)
CAD overall depth	3.16 in (80.35 mm)
Net Weight	0.08 lb(US) (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	CE[RETURN]Lloyd's[RETURN]GOST[RETURN]CSA[RETURN]UL
Standards	IEC 61810-1 UL 508 CSA C22.2 No 14
Ambient Air Temperature for Storage	-40185 °F (-4085 °C)
Ambient air temperature for operation	-40131 °F (-4055 °C)
Vibration resistance	3 gn +/- 1 mm 10150 Hz)5 cycles in operation 5 gn +/- 1 mm 10150 Hz)5 cycles not operating
IP degree of protection	IP40 conforming to IEC 60529
Shock resistance	10 gnin operation 30 gnnot operating
Pollution degree	3

## Ordering and shipping details

Category	21127-ZELIO ICE CUBE RELAYS
Discount Schedule	CP2
GTIN	3389119217125
Returnability	Yes
Country of origin	CN

# Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.22 in (3.1 cm)
Package 1 Width	4.06 in (10.3 cm)
Package 1 Length	4.92 in (12.5 cm)
Package 1 Weight	1.38 oz (39.0 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	1.22 in (3.1 cm)
Package 2 Width	4.06 in (10.3 cm)
Package 2 Length	4.92 in (12.5 cm)
Package 2 Weight	13.90 oz (394.0 g)
Unit Type of Package 3	S01
Number of Units in Package 3	120
Package 3 Height	5.91 in (15.0 cm)
Package 3 Width	5.91 in (15.0 cm)
Package 3 Length	15.75 in (40.0 cm)
Package 3 Weight	10.96 lb(US) (4.972 kg)

# Offer Sustainability

Sustainable offer status	Green Premium product
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
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EPEU RoHS Declaration
China RoHS Regulation	<sup>™</sup> China RoHS Declaration

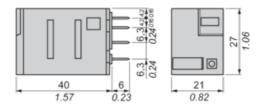
RoHS exemption information	<b>☑</b> Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	☑ End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Contractual warranty	
Warranty	18 months

# Product data sheet Dimensions Drawings

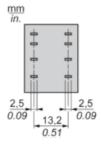
# RXM2AB3BD

## **Dimensions**

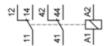
mm in.

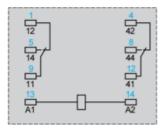


Pin Side View



## Wiring Diagram





Symbols shown in blue correspond to Nema marking.

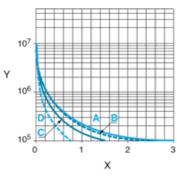
# Product data sheet Performance Curves

## RXM2AB3BD

#### **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)

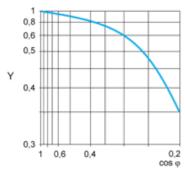
A RXM2AB•••

B RXM3AB•••

C RXM4AB\*\*\*

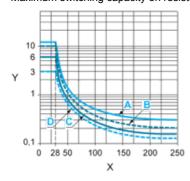
D RXM4GB•••

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•••

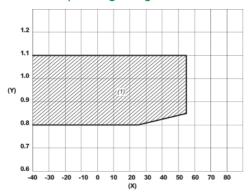
Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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.

## Coil Operating Range

## DC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)

Y: AC coil voltage (U/Uc)

(1) Permitted operating range area