

# Product datasheet

Specifications



## Harmony, Miniature plug-in relay, 5 A, 2 CO, without LED, 230 V AC

RXM2LB1P7

### Main

Range of product	Harmony Electromechanical Relays
Series name	Miniature
Product or component type	Plug-in relay
Device short name	RXM
Coil interference suppression	Without
Utilisation coefficient	20 %
Sale per indivisible quantity	10

### Complementary

Contacts type and composition	2 C/O
Contact operation	Standard
[Uc] control circuit voltage	230 V AC 50/60 Hz
[I <sub>the</sub> ] conventional enclosed thermal current	5 A at -40...55 °C
Status LED	Without
Control type	Without push-button
[Ui] rated insulation voltage	250 V conforming to IEC
[Uimp] rated impulse withstand voltage	3.6 kV during 1.2/50 µs conforming to IEC 61810-7
Contacts material	Silver alloy (Ag/Ni)
[I <sub>e</sub> ] rated operational current	5 A (AC-1/DC-1) NO conforming to IEC 2.5 A (AC-1/DC-1) NC conforming to IEC 1 A at 28 V (DC-13) NO
Minimum switching current	10 mA
Maximum switching voltage	250 V AC 250 V DC
Minimum switching voltage	17 V
Load current	5 A at 250 V AC 5 A at 28 V DC
Maximum switching capacity	1250 VA AC 140 W DC
Minimum switching capacity	170 mW
Operating rate	<= 1200 cycles/hour under load

<= 18000 cycles/hour no-load

<b>Mechanical durability</b>	10000000 cycles
<b>Electrical durability</b>	100000 cycles for resistive load 50000 cycles, 1 A at 28 V, DC-13 NO
<b>Average coil consumption in VA</b>	1.2 AC
<b>Drop-out voltage threshold</b>	>= 0.15 U <sub>c</sub> AC
<b>Operating time</b>	20 ms between coil de-energisation and making of the Off-delay contact 20 ms between coil energisation and making of the On-delay contact
<b>Average resistance</b>	15000 Ohm network: AC at 20 °C +/- 15 %
<b>Rated operational voltage limits</b>	184...253 V AC
<b>Protection category</b>	RT I
<b>Test levels</b>	Level A group mounting
<b>Operating position</b>	Any position
<b>CAD overall width</b>	21 mm
<b>CAD overall height</b>	27 mm
<b>CAD overall depth</b>	46 mm
<b>Dielectric strength</b>	2000 V AC between coil and contact 2000 V AC between poles 1000 V AC between contacts
<b>Safety reliability data</b>	B10d = 100000

## Environment

<b>Standards</b>	CE EN/IEC 61810-1 (iss. 2)
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Ambient air temperature for operation</b>	-40...55 °C
<b>Vibration resistance</b>	3 gn, amplitude = +/- 1 mm (f = 10...50 Hz)operating conforming to EN/IEC 60068-2-6 6 gn, amplitude = +/- 1 mm (f = 10...50 Hz)not operating conforming to EN/IEC 60068-2-6
<b>IP degree of protection</b>	IP40 conforming to EN/IEC 60529
<b>Shock resistance</b>	10 gn for opening conforming to EN/IEC 60068-2-27 5 gn for closing conforming to EN/IEC 60068-2-27

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	31 g
<b>Package 1 Height</b>	2.1 cm
<b>Package 1 width</b>	2.7 cm
<b>Package 1 Length</b>	4.6 cm
<b>Unit Type of Package 2</b>	BB1
<b>Number of Units in Package 2</b>	10
<b>Package 2 Weight</b>	390 g
<b>Package 2 Height</b>	3 cm
<b>Package 2 width</b>	11.5 cm
<b>Package 2 Length</b>	10 cm
<b>Unit Type of Package 3</b>	BB2

<b>Number of Units in Package 3</b>	10
<b>Package 3 Weight</b>	390 g
<b>Package 3 Height</b>	3 cm
<b>Package 3 width</b>	11.5 cm
<b>Package 3 Length</b>	10 cm

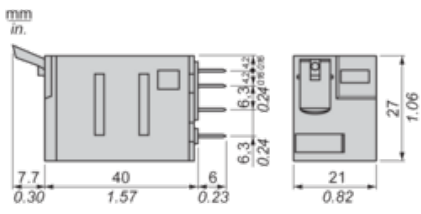
## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>

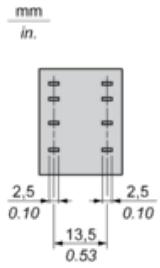
## Contractual warranty

<b>Warranty</b>	18 months
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Dimensions

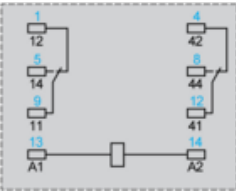


Pin Side View



Wiring Diagram

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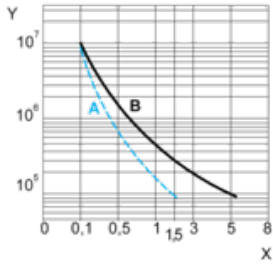
Symbols shown in blue correspond to Nema marking.

**Electrical Durability of Contacts**

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

For 2 Poles Relay



**X** : Contact current (A)

**Y** : Durability (Number of operating cycles)

**A** : Inductive load

**B** : Resistive load

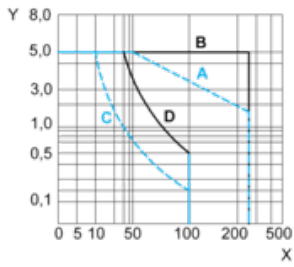
**Note** : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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- )

Maximum Switching Capacity

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For 2 Poles Relay



X : Contact voltage (v)

Y : Contact current (A)

A : Inductive AC load

B : Resistive AC load

C : Inductive DC load

D : Resistive DC load

**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- )