

# Product datasheet

Specifications



## miniature plug-in relay - Zelio RXM2L - 2 C/O - 12 V DC - 5 A - without LED

RXM2LB1JD

### 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	12 V DC
[Ithe] 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	4 kV during 1.2/50 µs conforming to IEC 61810-7
Contacts material	Silver alloy (Ag/Ni)
[Ie] 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 28 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
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles for resistive load 50000 cycles, 1 A at 28 V, DC-13 NO
Average coil consumption	0.9 W, DC
Drop-out voltage threshold	>= 0.1 Uc DC
Operating time	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
Average resistance	160 Ohm at 23 °C +/- 10 %
Rated operational voltage limits	9.6...13.2 V DC
Protection category	RT I
Test levels	Level A group mounting
Operating position	Any position
CAD overall width	21 mm
CAD overall height	27 mm
CAD overall depth	46 mm
Net weight	0.032 kg
Dielectric strength	2000 V AC between coil and contact with basic insulation 2000 V AC between poles with basic insulation 1000 V AC between contacts with micro disconnection
Safety reliability data	B10d = 100000

## Environment

Standards	CE IEC 61810-1 (iss. 2)
Ambient air temperature for storage	-40...85 °C
Ambient air temperature for operation	-40...55 °C
Vibration resistance	3 gn, amplitude = +/- 1 mm (f = 10...50 Hz)operating conforming to IEC 60068-2-6 6 gn, amplitude = +/- 1 mm (f = 10...50 Hz)not operating conforming to IEC 60068-2-6
IP degree of protection	IP40 conforming to IEC 60529
Pollution degree	3
Shock resistance	30 gn for not operating conforming to IEC 60068-2-27 10 gn for in operation conforming to IEC 60068-2-27

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.1 cm
Package 1 Width	2.1 cm
Package 1 Length	2.8 cm
Package 1 Weight	37 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3 cm
Package 2 Width	11.5 cm
Package 2 Length	10 cm

Package 2 Weight	390 g
Unit Type of Package 3	S02
Number of Units in Package 3	270
Package 3 Height	15 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	12.605 kg

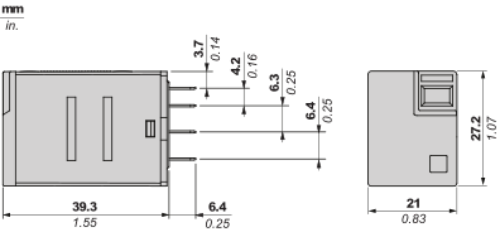
### Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

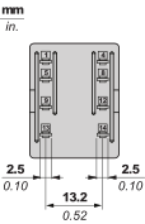
### Contractual warranty

Warranty	18 months
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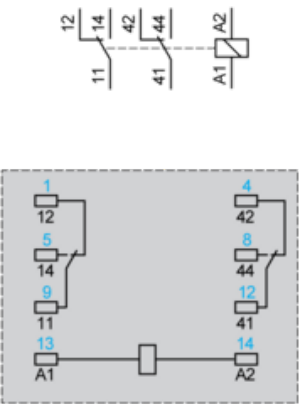
Dimensions



Pin Side View



Wiring Diagram

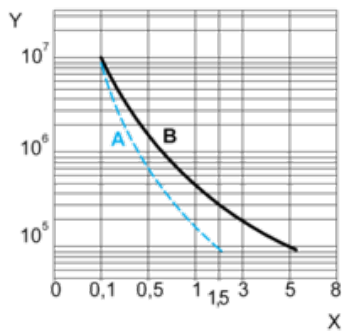


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

For 2 Poles Relay

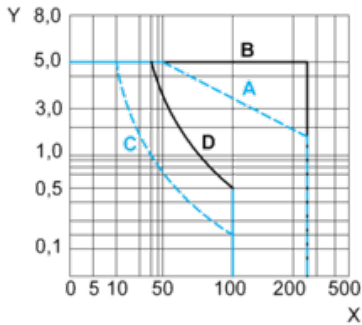


- X : Contact current (A)
- Y : Durability (Number of operating cycles)
- A : Inductive load
- B : Resistive load

**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

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- )  
For low level loads (below 10mA), we recommend to use RXM\*GB series with bifurcated contacts relays instead.

Recommended replacement(s)