Product data sheet
Characteristics

RXM2LB1B7
miniature, Harmony Electromechanical Relays, 5A, 2CO, without LED, 24V AC

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	24 V AC 50/60 Hz
[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	5 mA
Maximum switching voltage	250 V AC 28 V DC
Minimum switching voltage	5 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 in VA	1.2 AC
Drop-out voltage threshold	>= 0.15 Uc AC
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	180 Ohm at 23 °C +/- 10 %
Rated operational voltage limits	19.2...26.4 V AC
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	0.033 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	2.099 cm
Package 1 Width	2.751 cm
Package 1 Length	4.596 cm
Package 1 Weight	36.0 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.0 cm
Package 2 Width	10.9 cm
Package 2 Length	13.2 cm
Package 2 Weight	341.0 g
Unit Type of Package 3	CAR
Number of Units in Package 3	270
Package 3 Height	14.7 cm
Package 3 Width	30.0 cm
Package 3 Length	40.0 cm
Package 3 Weight	9.66 kg

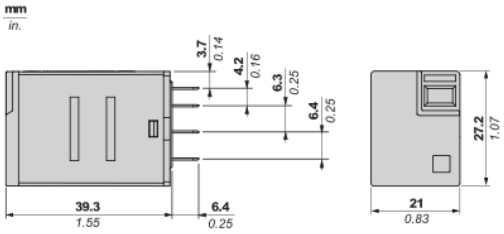
Offer Sustainability

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
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	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

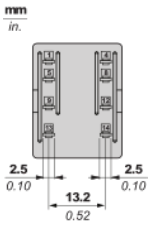
Contractual warranty

Warranty	18 months

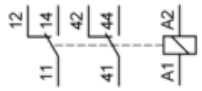
Dimensions

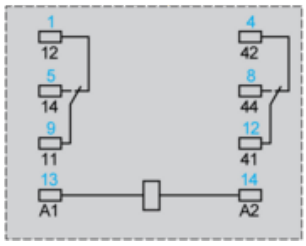


Pin Side View



Wiring Diagram



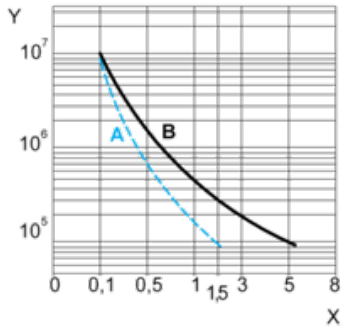


Symbols shown in blue correspond to Nema marking.

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

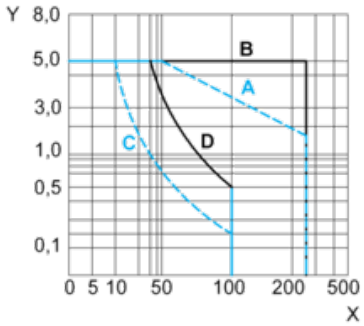
B : Resistive load

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

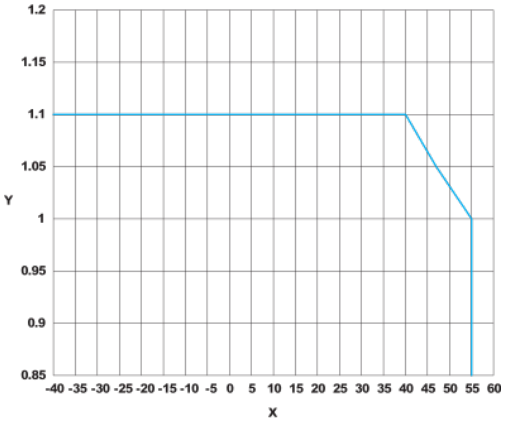
D : Resistive DC load

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.

AC Coil Voltage and Operating Temperature under continuous duty



X : Operating temperature (°C)

Y : AC coil voltage (UC)