Product datasheet

Specifications

Green Premium™

miniature, Harmony Electromechanical Relays, 5A, 2CO, without LED, 230V 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
[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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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	16500 Ohm at 23 °C +/- 15 %
Rated Operational Voltage Limits	184...253 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
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	2.1 cm
Package 1 Width	2.7 cm
Package 1 Length	4.6 cm
Package 1 Weight	31.0 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	10.985 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

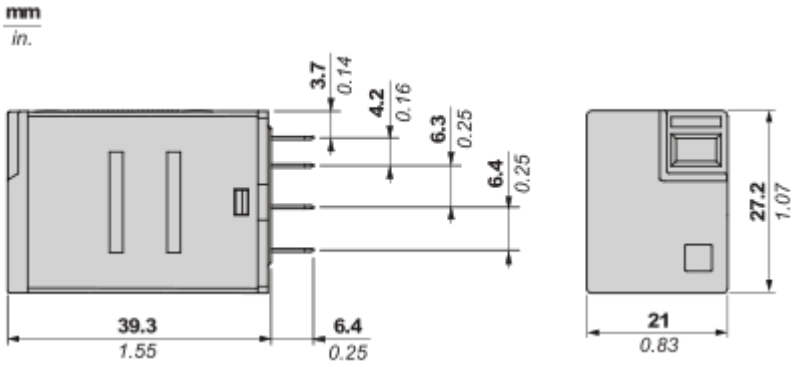
Reach Free Of Svhc	
Toxic Heavy Metal Free	
Mercury Free	
Rohs Exemption Information	Yes

Certifications & Standards

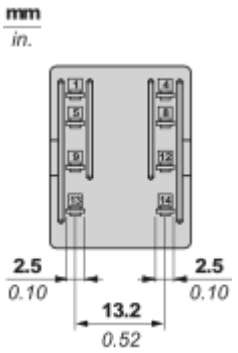
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Dimensions Drawings

Dimensions

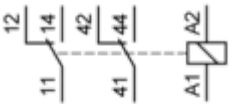


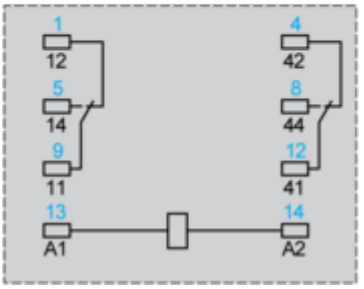
Pin Side View



Connections and Schema

Wiring Diagram





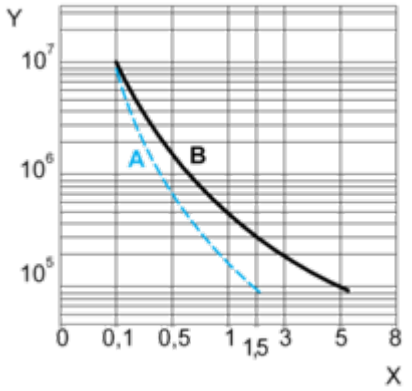
Symbols shown in blue correspond to Nema marking.

Performance Curves

Electrical Durability of Contacts

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

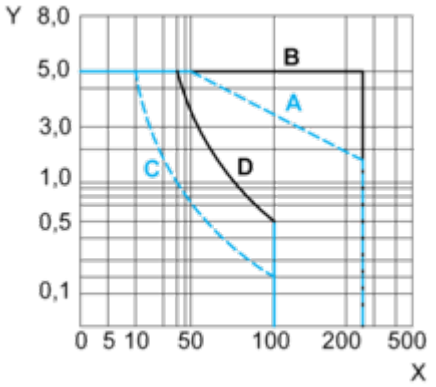
For 2 Poles Relay



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-)

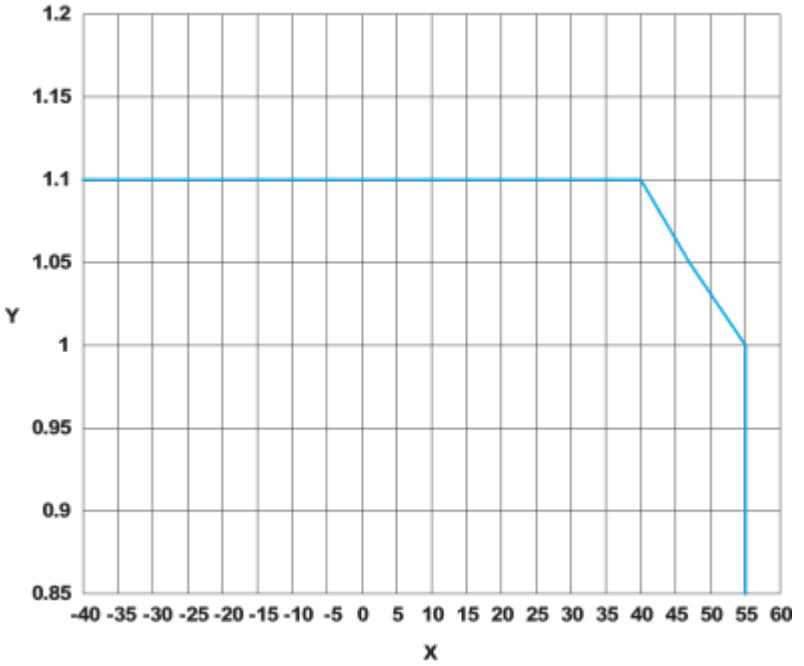
Maximum Switching Capacity

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)