Product datasheet

Specifications

miniature, Harmony Electromechanical Relays, 3A, 4CO, without LED, 230V AC

RXM4LB1P7

Main

Range of product	Harmony Electromechanical Relays
Series name	RXM series
Product or component type	Plug-in relay
Relay type	Miniature relay
Contacts type and composition	4 C/O
[Uc] control circuit voltage	230 V AC 50/60 Hz
[Ithe] conventional enclosed thermal current	3 A at -40…55 °C

Complementary

status LED	Without
Control type	Without lockable test button
[Ie] rated operational current	1.5 A at 28 V (DC) NC conforming to IEC 1.5 A at 250 V (AC) NC conforming to IEC 3 A at 28 V (DC) NO conforming to IEC 3 A at 250 V (AC) NO conforming to IEC 3 A at 24 V (DC) NO conforming to IEC 3 A at 220 V (AC) NO conforming to IEC 3 A at 28 V (DC) conforming to UL 3 A at 250 V (AC) conforming to UL
Minimum switching capacity	25 mW subject to switching frequency, environment or expected reliability level etc
Rated operational voltage limits	184...253 V AC
[Ui] rated insulation voltage	250 V conforming to IEC
Maximum switching voltage	250 V AC 28 V DC
Drop-out voltage threshold	>= 0.15 Uc AC
Load current	3 A at 250 V AC 3 A at 28 V DC
Maximum switching capacity	750 VA AC 84 W DC
Minimum switching current	5 mA subject to switching frequency, environment or expected reliability level etc
Minimum switching voltage	5 V subject to switching frequency, environment or expected reliability level etc
Average resistance	16500 Ohm at 23 °C +/- 15 %
Mechanical durability	20000000 cycles
Electrical durability	200000 cycles resistive load 23 °C 100000 cycles resistive load at 55 °C
Safety reliability data	B10d = 100000

Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Utilisation coefficient	20 %
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
Protection category	RT I
Pollution degree	2
Operating position	Any position
Test levels	Level A group mounting
Sale per indivisible quantity	10
Contacts material	Silver alloy (Ag/Ni)
Shape of pin	Flat (faston type)
Product weight	0.032 kg

Environment

Standards	IEC 61810-1 (iss. 2) CE UL 508
Ambient air temperature for storage	-40…85 °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
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	4.5 cm
Package 1 Weight	33.0 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 (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**20 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**0.3 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**20 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Compliant**
REACh Regulation	**Free of Substances of Very High Concern above the threshold**

Use Longer

Lifetime extension

Repair	**No**

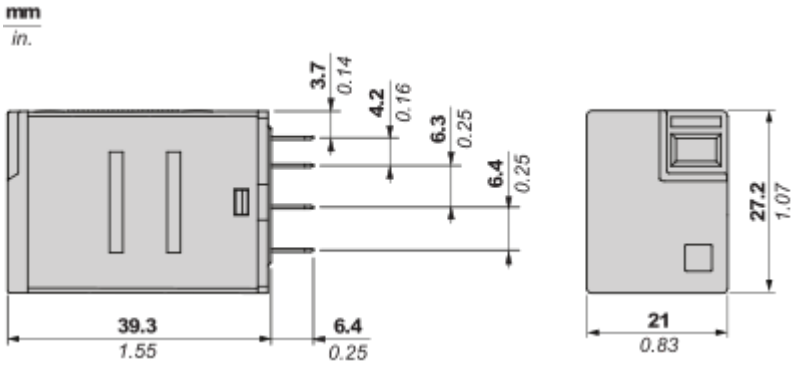
Use Again

Repack and remanufacture

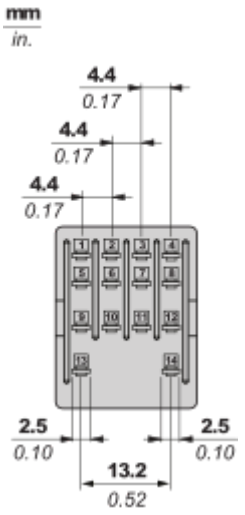
End of life manual availability	**End of Life Information**
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Dimensions Drawings

Dimensions

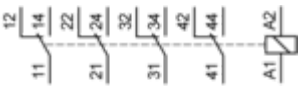


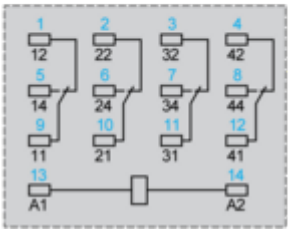
Pin Side View



Connections and Schema

Wiring Diagram





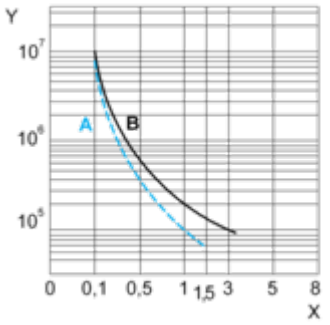
Symbols shown in blue correspond to Nema marking.

Performance Curves

Electrical Durability of Contacts

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

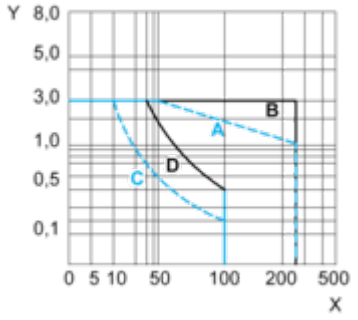
For 4 Poles Relay



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-)

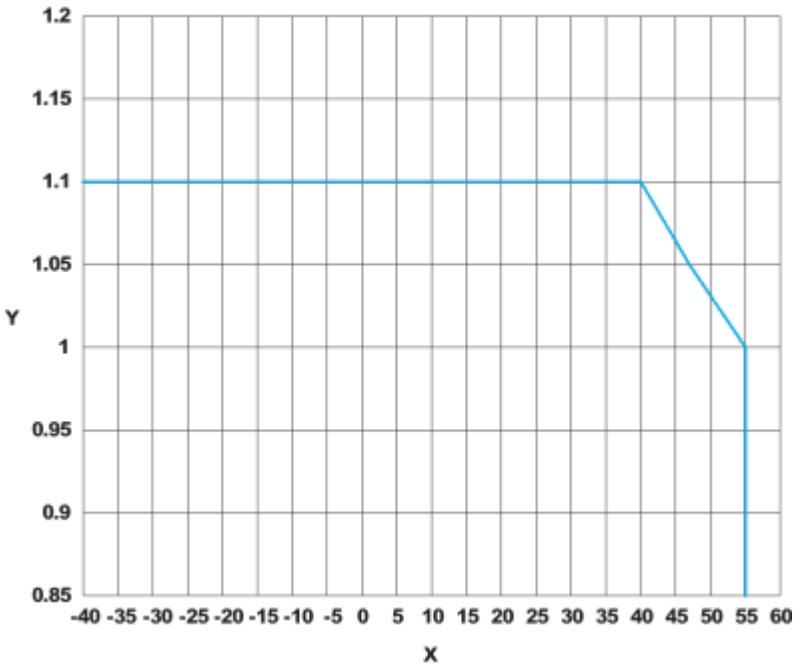
Maximum Switching Capacity

For 4 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.

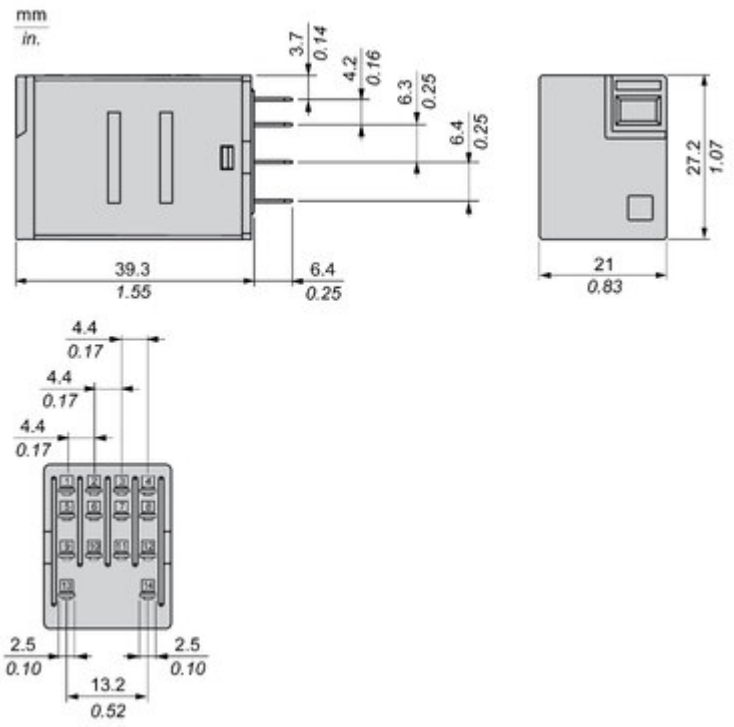
AC Coil Voltage and Operating Temperature under continuous duty



X : Operating temperature (°C)
Y : AC coil voltage (UC)

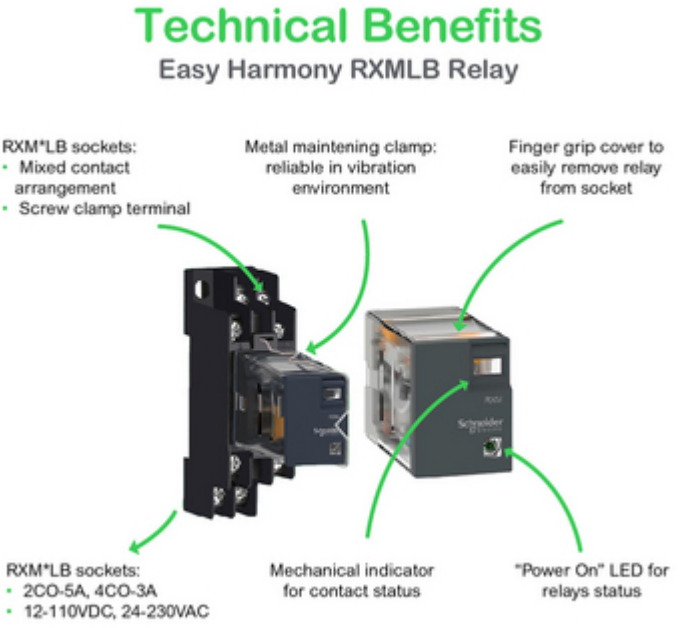
Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

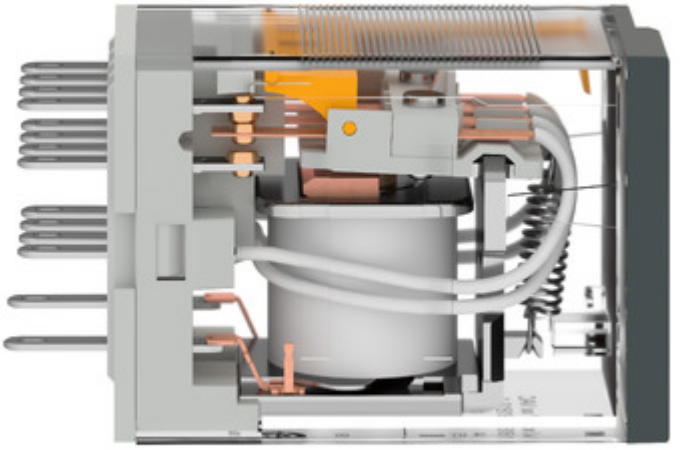


Offer Marketing Illustration

Product benefits / Features

Image of product / Alternate images

Alternative

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