Product datasheet

Specifications

Green Premium™

miniature plug in relay, Harmony Electromechanical Relays, 10A, 3CO, lockable test but to n, 48V DC

RXM3AB1ED

Main

Range Of Product	Harmony Electromechanical Relays
Series Name	Miniature
Product Or Component Type	Plug-in relay
Device Short Name	RXM
Contacts Type And Composition	3 C/O
[Uc] Control Circuit Voltage	48 V DC
Status Led	Without
Control Type	Lockable test button
Utilisation Coefficient	20 %

Complementary

Shape Of Pin	Flat
[Ui] Rated Insulation Voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
[Uimp] Rated Impulse Withstand Voltage	4 kV during 1.2/50 µs
Contacts Material	AgNi
[Ie] Rated Operational Current	10 A at 28 V (DC) NO conforming to IEC 10 A at 250 V (AC) NO conforming to IEC 5 A at 28 V (DC) NC conforming to IEC 5 A at 250 V (AC) NC conforming to IEC 10 A at 30 V (DC) conforming to UL 10 A at 277 V (AC) conforming to UL
Continuous Output Current	6.7 A
Maximum Switching Voltage	250 V conforming to IEC
Resistive Rated Load	10 A at 250 V AC 10 A at 28 V DC
Maximum Switching Capacity	2500 VA/280 W
Minimum Switching Capacity	170 mW at 10 mA, 17 V
Operating Rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical Durability	10000000 cycles
Electrical Durability	100000 cycles for resistive load
Average Coil Consumption	0.9 W
Drop-Out Voltage Threshold	>= 0.1 Uc

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

Operate Time	20 ms
Release Time	20 ms
Average Coil Resistance	2560 Ohm at 20 °C +/- 10 %
Rated Operational Voltage Limits	38.4...52.8 V DC
Safety Reliability Data	B10d = 100000
Protection Category	RT I
Test Levels	Level A group mounting
Operating Position	Any position
Cad Overall Height	82.8 mm
Cad Overall Depth	80.35 mm
Net Weight	0.037 kg
Device Presentation	Complete product

Environment

Dielectric Strength	1300 V AC between contacts with micro disconnection 2000 V AC between coil and contact 2000 V AC between poles
Product Certifications	UL Lloyd's CE CSA GOST IECEE CB Scheme
Standards	UL 508 IEC 61810-1 CSA C22.2 No 14
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…150 Hz)5 cycles in operation 5 gn, amplitude = +/- 1 mm (f = 10…150 Hz)5 cycles not operating
Ip Degree Of Protection	IP40 conforming to IEC 60529
Shock Resistance	10 gn for in operation 30 gn for not operating
Pollution Degree	2

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	38.0 g
Unit Type Of Package 2	BB1
Number Of Units In Package 2	10
Package 2 Height	3.1 cm
Package 2 Width	10.3 cm

Package 2 Length	12.5 cm
Package 2 Weight	392.0 g
Unit Type Of Package 3	S01
Number Of Units In Package 3	120
Package 3 Height	15.0 cm
Package 3 Width	15.0 cm
Package 3 Length	40.0 cm
Package 3 Weight	4.958 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

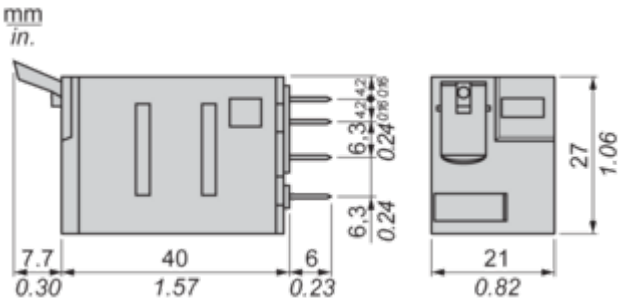
Rohs Exemption Information	Yes

Certifications & Standards

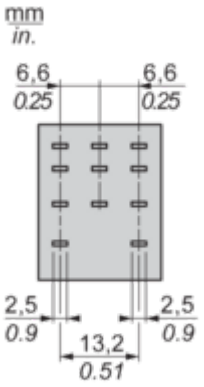
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following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

Dimensions Drawings

Dimensions

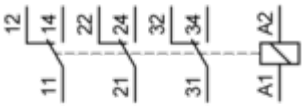


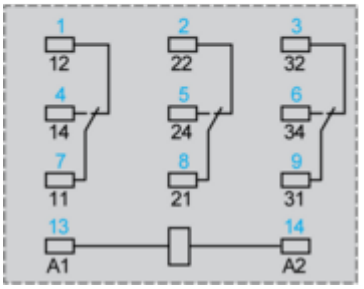
Pin Side View



Connections and Schema

Wiring Diagram



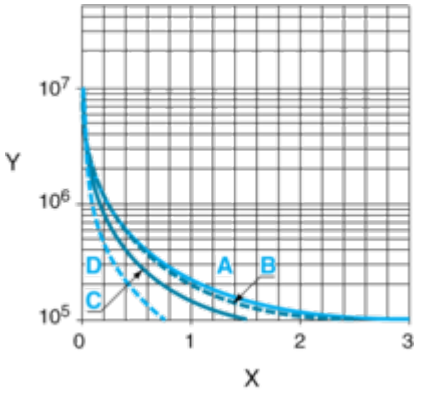


Symbols shown in blue correspond to Nema marking.

Performance Curves

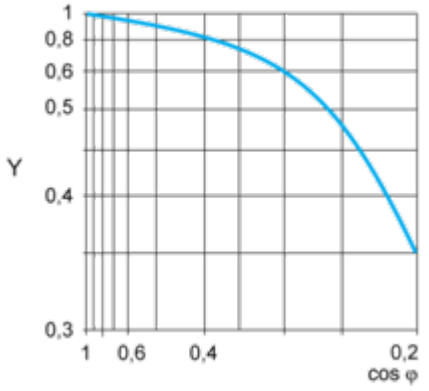
Electrical Durability of Contacts

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



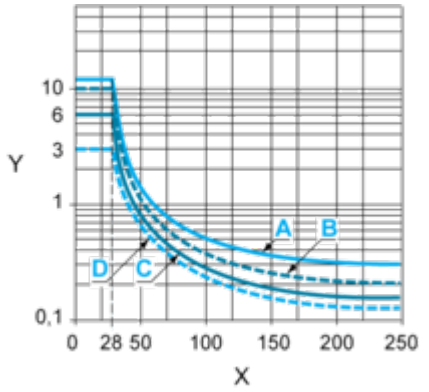
X Switching capacity (kVA)
Y Durability (Number of operating cycles)
A RXM2AB•••
B RXM3AB•••
C RXM4AB•••
D RXM4GB•••

Reduction coefficient for inductive AC load (depending on power factor cos ϕ)



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load

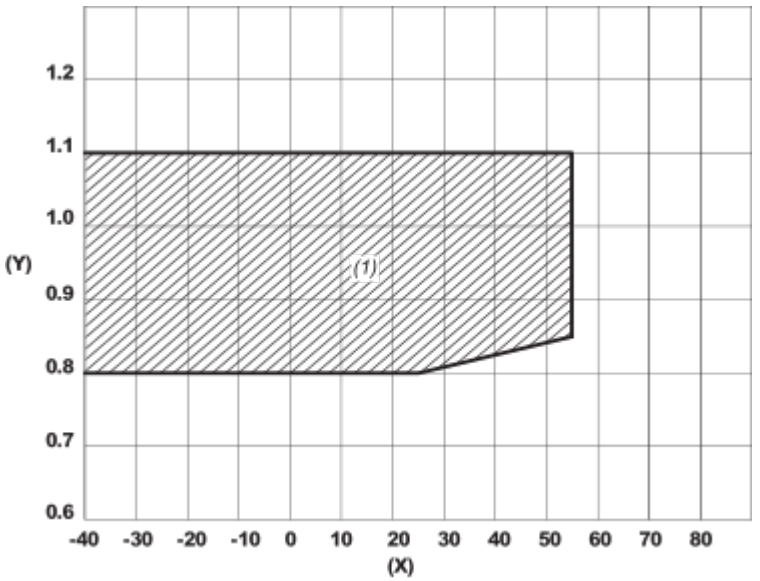


X Voltage DC
Y Current DC
A RXM2AB•••

B RXM3AB•••
C RXM4AB•••
D RXM4GB•••
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.

Coil Operating Range

DC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)
Y : AC coil voltage (U/Uc)
(1) Permitted operating range area