Product datasheet

Specification





Miniature plug-in relay, 10 A, 3 CO, 110 V DC

RXM3AB1FD

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	110 V DC	
Status Led	Without	
Control Type	Lockable test button	
Utilisation Coefficient	20 %	

Complementary

oompromontary	
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
[le] 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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Operate Time	20 ms	
Release Time	20 ms	
Average Coil Resistance	13440 Ohm at 20 °C +/- 10 %	
Rated Operational Voltage Limits	88121 V DC	
Safety Reliability Data	B10d = 100000	
Protection Category	RTI	
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	-4085 °C	
Ambient Air Temperature For Operation	-4055 °C	
Vibration Resistance	3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation 5 gn, amplitude = +/- 1 mm (f = 10150 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 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	398 g
Unit Type Of Package 3	S01
Number Of Units In Package 3	120
Package 3 Height	15 cm
Package 3 Width	15 cm
Package 3 Length	40 cm
Package 3 Weight	5.023 kg

Contractual warranty

Warranty 18 months

Sustainability Screen Premium*

Green PremiumTM **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ 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

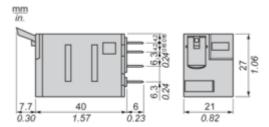
Yes

Certifications & Standards

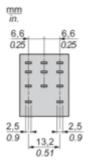
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following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

Dimensions Drawings

Dimensions



Pin Side View

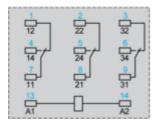


RXM3AB1FD

Connections and Schema

Wiring Diagram





Symbols shown in blue correspond to Nema marking.

Product datasheet

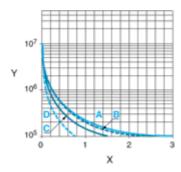
RXM3AB1FD

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)

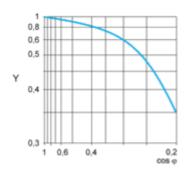
A RXM2AB***

B RXM3AB•••

C RXM4AB***

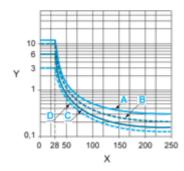
D RXM4GB•••

Reduction coefficient for inductive AC load (depending on power factor $\cos \varphi$)



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC

Y Current DC

A RXM2AB•••

B RXM3AB•••

C RXM4AB•••

 $\textbf{D} \; \mathsf{RXM4GB} \\ \bullet \\ \bullet \\$

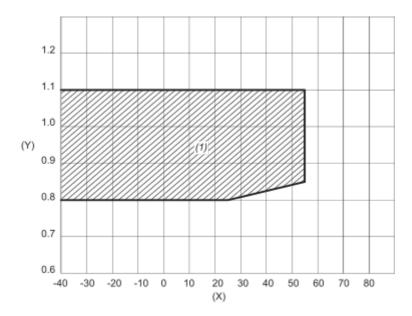
Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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



 ${\bf X}$: Ambient temperature (°C)

Y: AC coil voltage (U/Uc)

(1) Permitted operating range area