

Product data sheet

Specifications



miniature plug in relay, Harmony Electromechanical Relays, 10A, 3CO, without LED, lockable test button, flat (faston type), 12V DC

RXM3AB1JD

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	3 C/O
status LED	Without
Control type	Lockable test button
[Uc] control circuit voltage	12 V DC
[Ithe] conventional enclosed thermal current	10 A
Continuous output current	6.7 A

Complementary

[Uimp] rated impulse withstand voltage	4 kV 1.2/50 μ s
[Ie] rated operational current	10 A 28 V DC) NO IEC 10 A 250 V AC) NO IEC 5 A 28 V DC) NC IEC 5 A 250 V AC) NC IEC 10 A 30 V DC) UL 10 A 277 V AC) UL
Minimum switching capacity	170 mW 10 mA, 17 V
Electrical durability	100000 cycles resistive
Rated operational voltage limits	9.6...13.2 V DC
[Ui] rated insulation voltage	250 V IEC 300 V CSA 300 V UL
Maximum switching voltage	250 V IEC
Drop-out voltage threshold	$\geq 0.1 U_c$
Load current	10 A 250 V AC 10 A 28 V DC
Operating time	20 ms
Maximum switching capacity	2500 VA/280 W
Average resistance	160 Ohm 20 °C +/- 10 %
Average coil consumption	0.9 W
Mechanical durability	10000000 cycles
Safety reliability data	B10d = 100000

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

Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Utilisation coefficient	20 %
CAD overall height	3.1 in (79 mm)
CAD overall depth	3.09 in (78.45 mm)
Reset time	20 ms
Dielectric strength	1300 V AC between contacts micro disconnection 2000 V AC between coil and contact 2000 V AC between poles
Compatibility code	RXM
Protection category	RT I
Pollution degree	2
Operating position	Any position
Test levels	Level A group mounting
Device presentation	Complete product
Contacts material	AgNi
Shape of pin	Flat (faston type)
Product weight	0.082 lb(US) (0.037 kg)

Environment

Ambient air temperature for operation	-40...131 °F (-40...55 °C)
IP degree of protection	IP40 conforming to IEC 60529
Standards	IEC 61810-1 CSA C22.2 No 14 UL 508
Product certifications	UL Lloyd's CE CSA GOST IECEE CB Scheme
Ambient air temperature for storage	-40...185 °F (-40...85 °C)
Vibration resistance	3 gn +/- 1 mm 10...150 Hz)5 cycles in operation 5 gn +/- 1 mm 10...150 Hz)5 cycles not operating
Shock resistance	10 gnin operation 30 gnnot operating

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.6 in (4.1 cm)
Package 1 Width	0.8 in (2.1 cm)
Package 1 Length	1.1 in (2.8 cm)
Package 1 Weight	1.4 oz (39 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	1.2 in (3.1 cm)

Package 2 Width	4.06 in (10.3 cm)
Package 2 Length	4.9 in (12.5 cm)
Package 2 Weight	14.1 oz (400 g)
Unit Type of Package 3	S01
Number of Units in Package 3	120
Package 3 Height	5.9 in (15 cm)
Package 3 Width	5.9 in (15 cm)
Package 3 Length	15.7 in (40 cm)
Package 3 Weight	11.16 lb(US) (5.06 kg)

Contractual warranty

Warranty (in months)	18
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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	16 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]	16 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
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Use Again

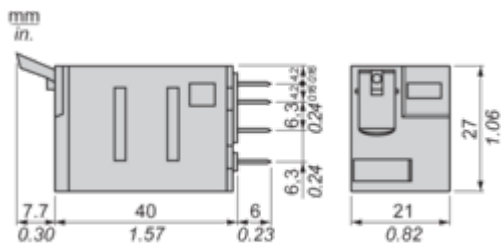


Repack and remanufacture

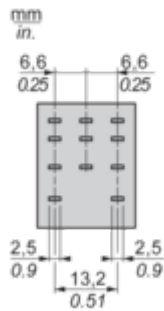
Recyclability potential, in %	55
Circularity Profile	End of Life Information
Take-back	No

Dimensions Drawings

Dimensions



Pin Side View



Connections and Schema

Wiring Diagram

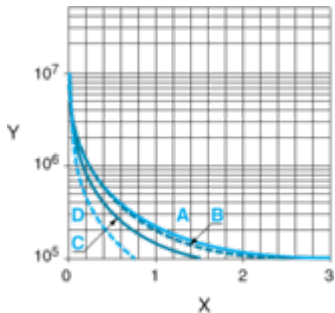


Symbols shown in blue correspond to Nema marking.

Performance Curves

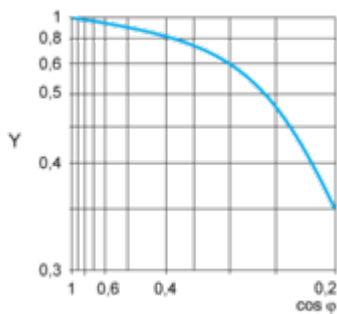
Electrical Durability of Contacts

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

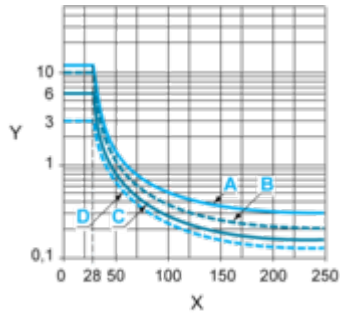


- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)
- A RXM2AB...
- B RXM3AB...
- C RXM4AB...
- D RXM4GB...

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



- Y Reduction coefficient (A)
- Maximum switching capacity on resistive DC load

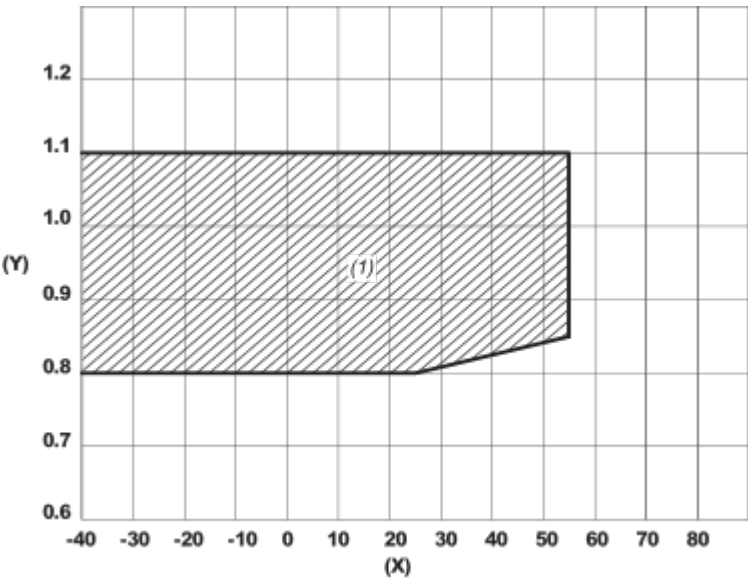


- X Voltage DC
- Y Current DC
- A RXM2AB...
- B RXM3AB...
- C RXM4AB...
- D RXM4GB...

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

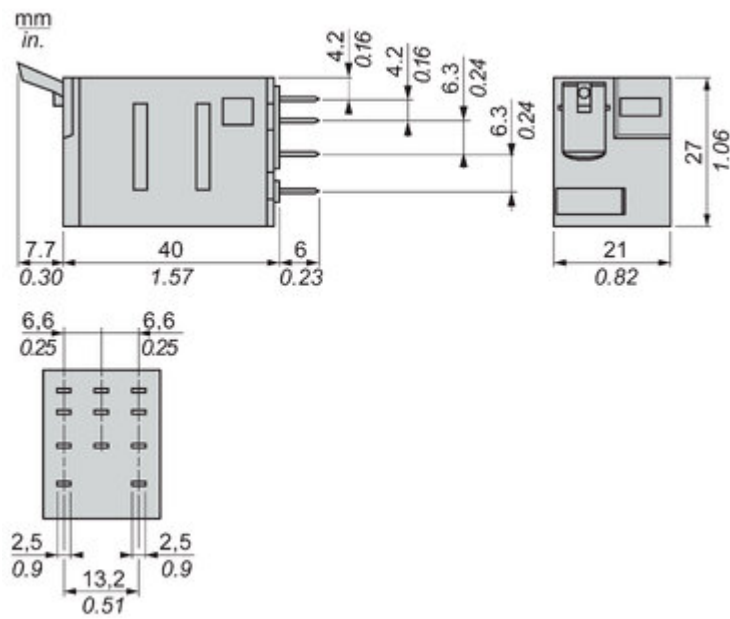
DC Coil Operating Range VS Ambient Temperature



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

Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

Features

Harmony RXMAB Relay



Pluggable relay module for easy replacement and retrofitting of relays



Conforms to international standards: IEC, CE, UL, CSA, EAC, Lloyd's, RoHS and REACH



Save time and cost with pre-assembled relays and push-in sockets

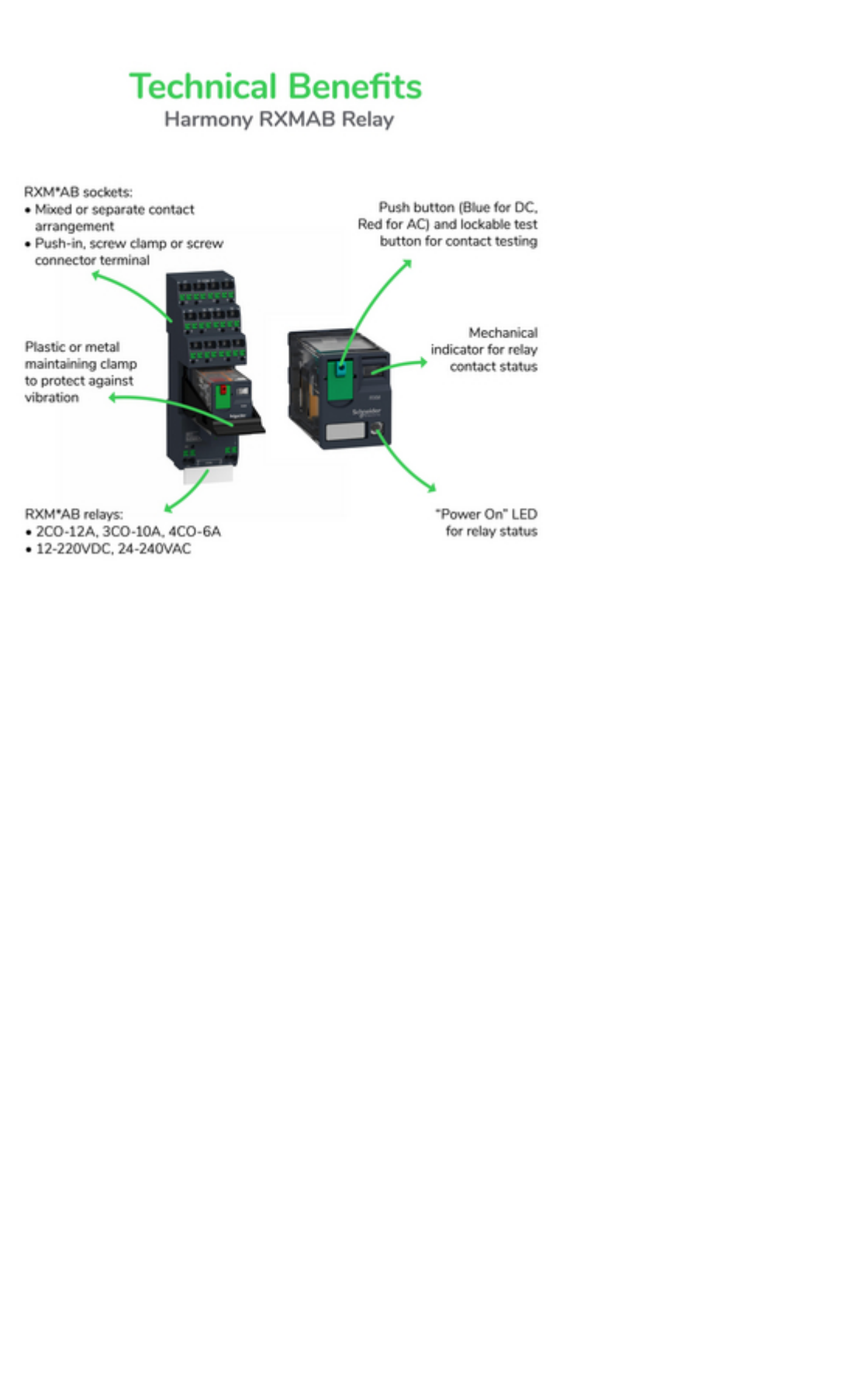


Add-on protection modules and timer relay for flexibility



Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

Avantages techniques

Relais Harmony RXMAB

Prises RXM*AB :

- Disposition des contacts mixtes ou séparés
- Borne push-in, borne à vis ou connecteur à vis

Bouton poussoir (bleu pour DC, rouge pour AC) et bouton test verrouillable pour tester les contacts

Clapet de maintien en plastique ou en métal pour protéger des vibrations

Indicateur mécanique du statut des contacts du relais

Relais RXM*AB :

- 2CO-12A, 3CO-10A, 4CO-6A
- 12-220VDC, 24-240VAC

LED « Power On » pour le statut du relais



The illustration shows two views of the RXMAB relay. The left view shows the relay with its terminal block and a protective flap. The right view shows the relay with its push-button and test button. Green arrows point from the text labels to the corresponding features on the relay.

Offer Marketing Illustration

Product benefits / Features

Caractéristiques

Relais Harmony RXMAB



Module de relais enfichable pour un remplacement facile et une mise à niveau des relais



Conforme aux normes internationales : IEC, CE, UL, CSA, EAC, Lloyd's, RoHS et REACH



Gain de temps et de coûts grâce aux relais pré-assemblés et aux prises enfichables



Ajout de modules de protection et de relais temporisés pour plus de flexibilité



Image of product / Alternate images

Alternative



