

# Product data sheet

Specifications



miniature plug in relay, Harmony Electromechanical Relays, 10A, 3CO, without LED, lockable test button, flat (faston type), 24V DC

RXM3AB1BD

## 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	24 V DC
[Ithe] conventional enclosed thermal current	10 A
Continuous output current	6.7 A

## Complementary

[Uiimp] rated impulse withstand voltage	4 kV during 1.2/50 $\mu$ s
[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
Minimum switching capacity	170 mW at 10 mA, 17 V
Electrical durability	100000 cycles for resistive load
Rated operational voltage limits	19.2...26.4 V DC
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
Maximum switching voltage	250 V conforming to IEC
Drop-out voltage threshold	$\geq 0.1$ Uc
Load current	10 A at 250 V AC 10 A at 28 V DC
Operating time	20 ms
Maximum switching capacity	2500 VA/280 W
Average resistance	650 Ohm at 20 °C +/- 10 %
Average coil consumption	0.9 W
Mechanical durability	10000000 cycles
Safety reliability data	B10d = 100000

<b>Operating rate</b>	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
<b>Utilisation coefficient</b>	20 %
<b>CAD overall height</b>	82.8 mm
<b>CAD overall depth</b>	80.35 mm
<b>reset time</b>	20 ms
<b>Dielectric strength</b>	1300 V AC between contacts with micro disconnection 2000 V AC between coil and contact 2000 V AC between poles
<b>Compatibility code</b>	RXM
<b>Protection category</b>	RT I
<b>Pollution degree</b>	2
<b>Operating position</b>	Any position
<b>Test levels</b>	Level A group mounting
<b>Device presentation</b>	Complete product
<b>Contacts material</b>	AgNi
<b>Shape of pin</b>	Flat (faston type)
<b>Product weight</b>	0.037 kg

## Environment

<b>Ambient air temperature for operation</b>	-40...55 °C
<b>IP degree of protection</b>	IP40 conforming to IEC 60529
<b>Standards</b>	IEC 61810-1 CSA C22.2 No 14 UL 508
<b>Product certifications</b>	UL Lloyd's CE CSA GOST IECEE CB Scheme
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Vibration resistance</b>	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
<b>Shock resistance</b>	10 gn for in operation 30 gn for not operating

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	3.100 cm
<b>Package 1 Width</b>	10.300 cm
<b>Package 1 Length</b>	12.500 cm
<b>Package 1 Weight</b>	38.000 g
<b>Unit Type of Package 2</b>	BB1
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	3.100 cm

Package 2 Width	10.300 cm
Package 2 Length	12.500 cm
Package 2 Weight	393.000 g
Unit Type of Package 3	S02
Number of Units in Package 3	240
Package 3 Height	15.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	10.015 kg

## Contractual warranty

Warranty	18 months
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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**

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](#) Pro-active compliance (Product out of EU RoHS legal scope)

California proposition 65 **WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](#)**

## Use Again

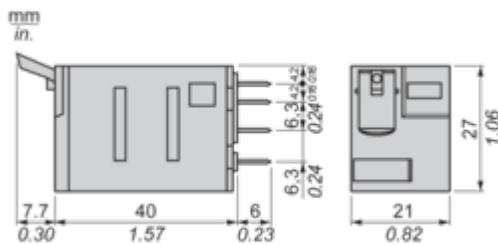
### Repack and remanufacture

End of life manual availability [End of Life Information](#)

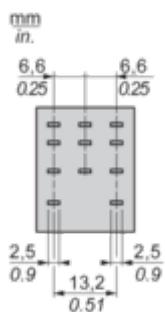
Take-back No

## Dimensions Drawings

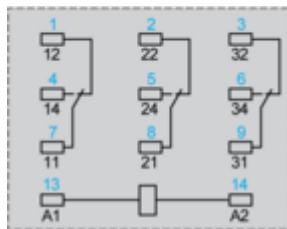
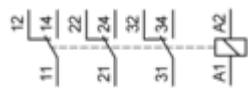
## Dimensions



Pin Side View



## Connections and Schema

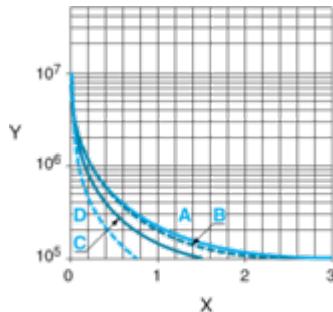
Wiring Diagram

Symbols shown in blue correspond to Nema marking.

## Performance Curves

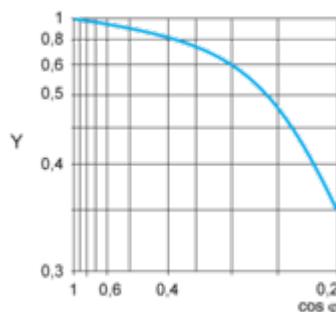
Electrical Durability of Contacts

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

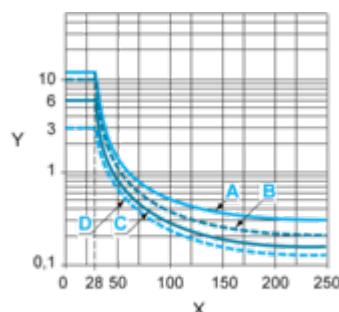


X Switching capacity (kVA)  
Y Durability (Number of operating cycles)  
A RXM2AB...  
B RXM3AB...  
C RXM4AB...  
D RXM4GB...

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



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...

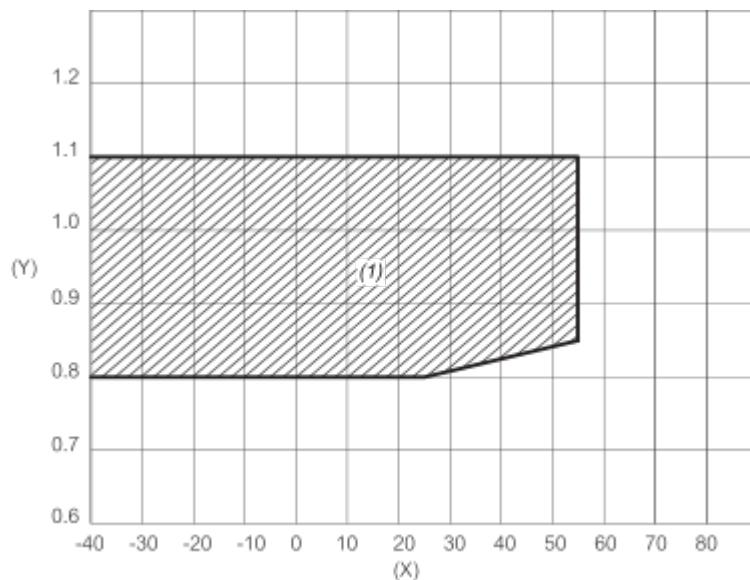
**Note :** These are typical curves, actual durability depends on load, environment, duty cycle, etc.  
For inductive load, to increase relay life cycles, please add a proper load protection circuit (eg: RC protection/Varistor/ free Wheeling diode -DC load only- ).  
For low level loads (below 10mA), we recommend to use RXM\*GB series with bifurcated contacts relays instead.



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**Coil Operating Range**

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**DC Coil Operating Range VS Ambient Temperature**

X : Ambient temperature (°C)

Y : AC coil voltage ( $U/U_c$ )

(1) Permitted operating range area

## Technical Illustration

## Dimensions

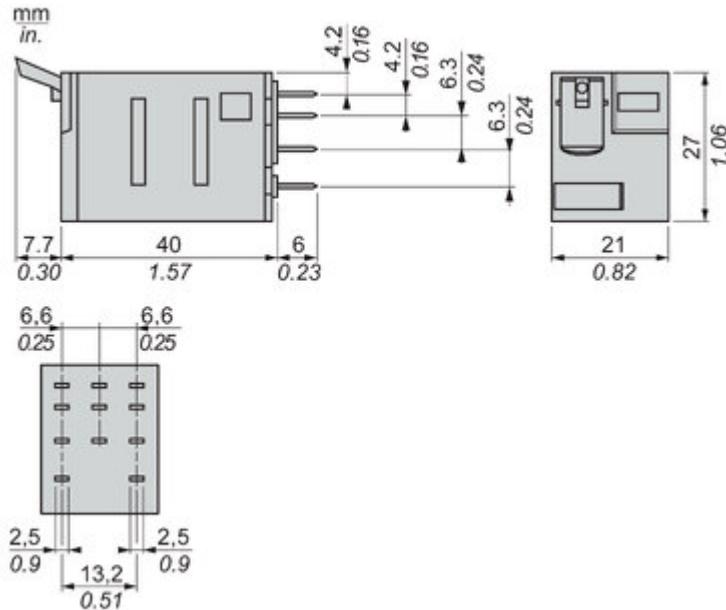


Image of product / Alternate images

Alternative

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