

Product data sheet

Specifications



miniature plug in relay, Harmony Electromechanical Relays, 10A, 3CO, without LED, with lockable test button, flat (faston type), 120V AC

RXM3AB1F7

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	120 V AC 50/60 Hz
[Ithe] conventional enclosed thermal current	10 A
Continuous output current	6.7 A

Complementary

[Uimp] rated impulse withstand voltage	4 kV during 1.2/50 µs
[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
Average coil consumption in VA	1.2 at 60 Hz
Rated operational voltage limits	96...132 V AC
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
Average consumption	1.2 VA at 60 Hz
Maximum switching voltage	250 V conforming to IEC
Drop-out voltage threshold	>= 0.15 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	4430 Ohm at 20 °C +/- 15 %
Mechanical durability	10000000 cycles

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

Safety reliability data	B10d = 100000
Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Utilisation coefficient	20 %
CAD overall height	79 mm
CAD overall depth	78.45 mm
reset time	20 ms
Dielectric strength	1300 V AC between contacts with 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)
Net weight	0.037 kg

Environment

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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.064 cm
Package 1 Width	2.032 cm
Package 1 Length	2.794 cm
Package 1 Weight	36.287 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10

Package 2 Height	3.048 cm
Package 2 Width	10.160 cm
Package 2 Length	11.684 cm
Package 2 Weight	390.089 g

Contractual warranty

Warranty	18 months
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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	20
Environmental Disclosure	Product Environmental Profile

Use Better

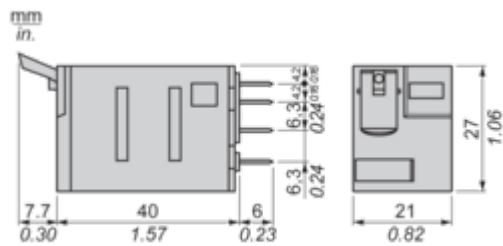
Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is 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

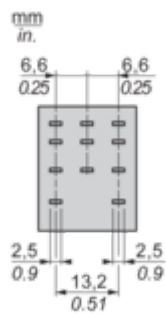
Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No

Dimensions Drawings

Dimensions

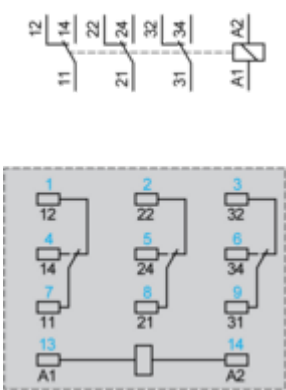


Pin Side View



Connections and Schema

Wiring Diagram

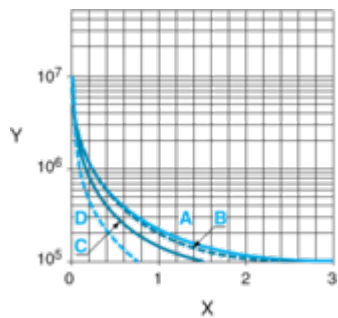


Symbols shown in blue correspond to Nema marking.

Performance Curves

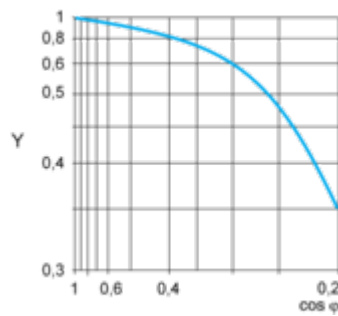
Electrical Durability of Contacts

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

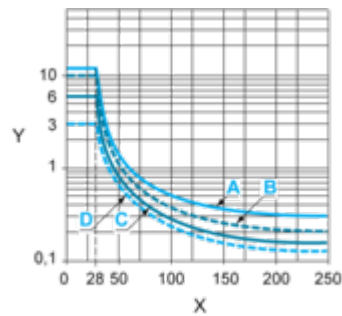


- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)
- A RXM2AB...
- B RXM3AB...
- C RXM4AB...
- D RXM4GB...

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



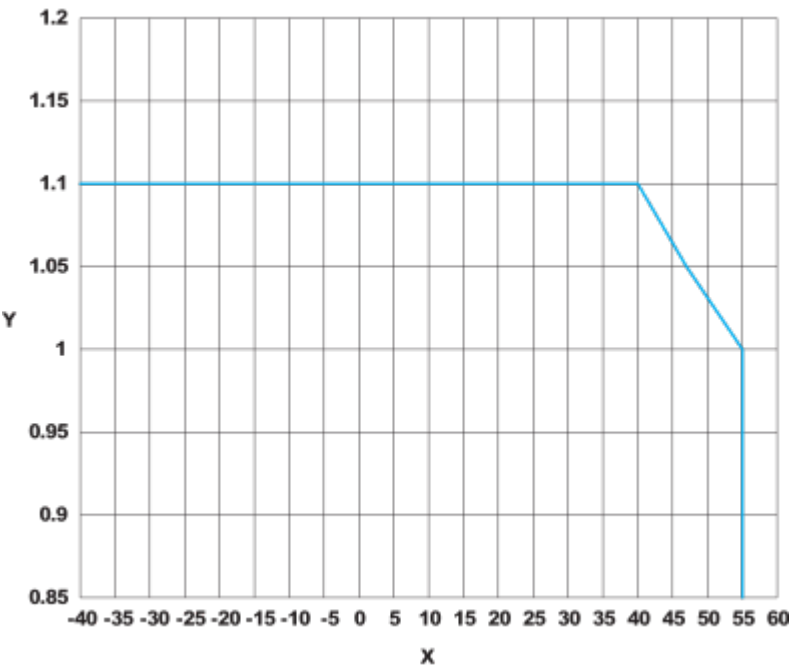
- Y Reduction coefficient (A)
- Maximum switching capacity on resistive DC load



- 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.

AC Coil Voltage and Operating Temperature under continuous duty



X : Operating temperature (°C)

Y : AC coil voltage (UC)

Technical Illustration

Dimensions

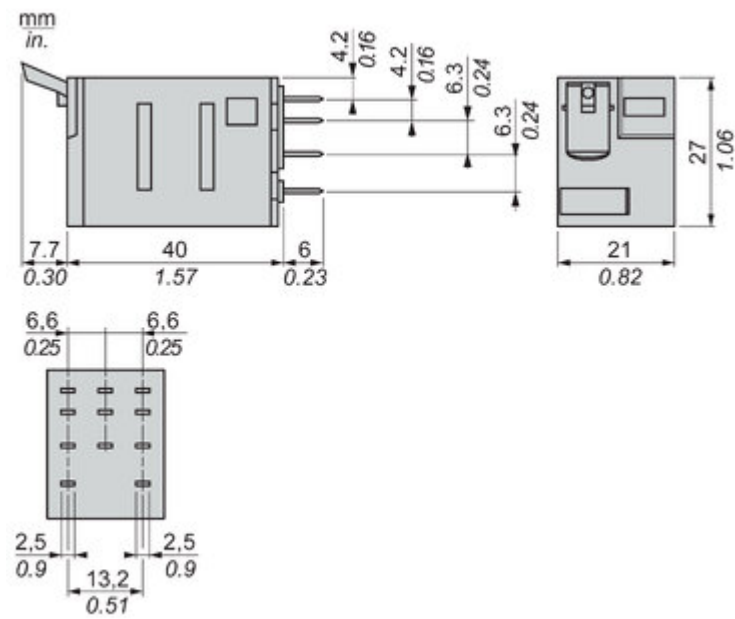


Image of product / Alternate images

Alternative

