

Product data sheet

MINIATURE RELAY, 120VAC, 8 BLADE

Specifications

TAGS: CR4209, CR4210, CR4223, CR4225, CR4226, CR4306  
CR4310, CR4316, CR4317



miniature plug in relay, Harmony  
Electromechanical Relays, 12A,  
2CO, with LED, lockable test but to  
n, 120V AC

RXM2AB2F7

Product availability: Stock - Normally stocked in distribution facility

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	2 C/O
Status LED	With
Control Type	Lockable test button
[Uc] control circuit voltage	120 V AC 50/60 Hz
[Ithe] conventional enclosed thermal current	12 A
Continuous output current	10 A

Complementary

[Uimp] rated impulse withstand voltage	4 kV 1.2/50 µs
[Ie] rated operational current	<del>12 A 28 V DC) NO-IEC</del> <del>12 A 250 V AC) NO-IEC</del> <del>6 A 28 V DC) NC-IEC</del> <del>6 A 250 V AC) NC-IEC</del> <del>12 A 28 V DC) UL</del> <del>12 A 277 V AC) UL</del>
Minimum switching capacity	170 mW 10 mA, 17 V
Electrical durability	100000 cycles resistive
Average coil consumption in VA	1.2 60 Hz
Rated operational voltage limits	96...132 V AC
[Ui] rated insulation voltage	<del>250 V IEC</del> 300 V CSA 300 V UL
Average consumption	1.2 VA 60 Hz
Maximum switching voltage	250 V IEC
Drop-out voltage threshold	>= 0.15 Uc
Load current	12 A 250 V AC 12 A 28 V DC
Operating time	20 ms
Maximum switching capacity	3000 VA/336 W
Average resistance	4430 Ohm 20 °C +/- 15 %

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

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

Mechanical durability	10000000 cycles
Safety reliability data	B10d = 100000
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 with micro disconnection 2000 V AC between coil and contact with basic insulation 2000 V AC between poles with basic insulation
Compatibility code	RXM
Protection category	RT I
Pollution degree	3
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	0.082 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	CSA C22.2 No 14 IEC 61810-1 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

## Ordering and shipping details

Category	US10CP221127
Discount Schedule	0CP2
GTIN	3389119403504
Returnability	Yes
Country of origin	CN

## Packing Units

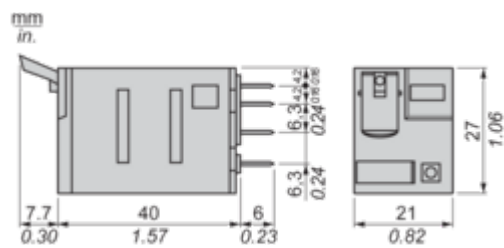
Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	0.827 in (2.100 cm)
Package 1 Width	1.063 in (2.700 cm)
Package 1 Length	1.811 in (4.600 cm)
Package weight(Lbs)	1.305 oz (37.000 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	1.181 in (3.000 cm)
Package 2 Width	4.016 in (10.200 cm)
Package 2 Length	4.921 in (12.500 cm)
Package 2 Weight	13.686 oz (388.000 g)
Unit Type of Package 3	S02
Number of Units in Package 3	240
Package 3 Height	5.906 in (15.000 cm)
Package 3 Width	11.811 in (30.000 cm)
Package 3 Length	15.748 in (40.000 cm)
Package 3 Weight	21.625 lb(US) (9.809 kg)

## Contractual warranty

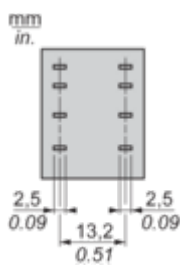
Warranty (in months)	18
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Dimensions Drawings

Dimensions

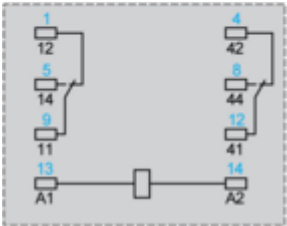


Pin Side View



Connections and Schema

Wiring Diagram

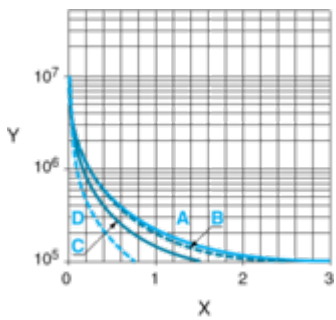


Symbols shown in blue correspond to Nema marking.

Performance Curves

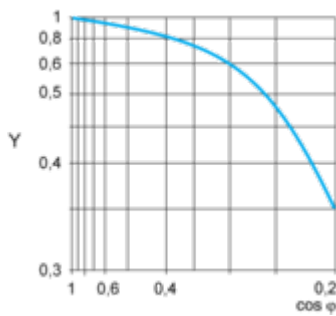
Electrical Durability of Contacts

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

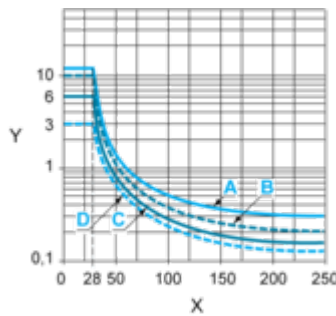


- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)
- A RXM2AB...
- B RXM3AB...
- C RXM4AB...
- D RXM4GB...

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



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

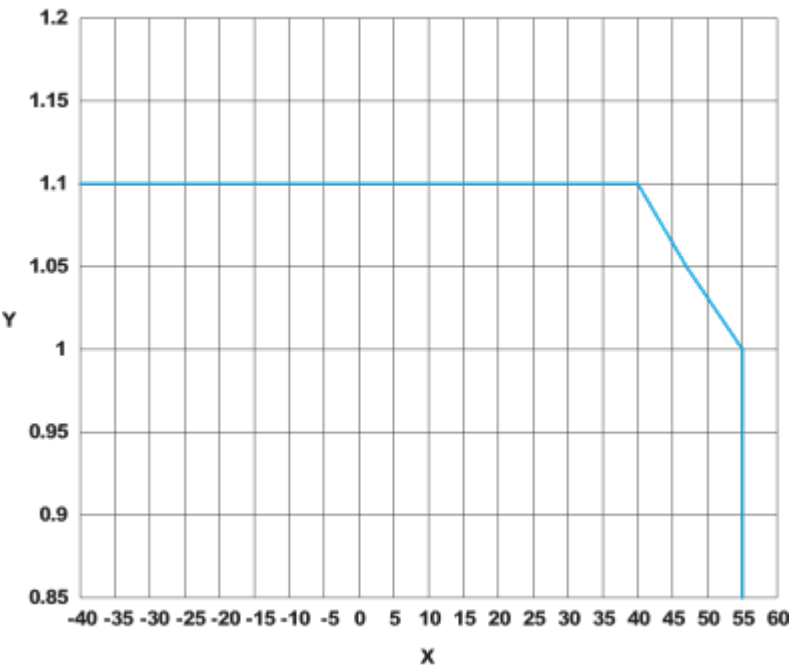


- X Voltage DC
- Y Current DC
- A RXM2AB...
- B RXM3AB...
- C RXM4AB...
- D RXM4GB...

**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

