Product data sheet MINIATURE RELAY, 120VAC, 11 BLADE

Specifications

TAGS: CR4301

miniature plug in relay, Harmony Electromechanical Relays, 10A, 3CO, with LED, lockable test but to n, 120V AC

RXM3AB2F7

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	3 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	10 A
Continuous output current	6.7 A

Complementary

[Uimp] rated impulse withstand voltage	4 kV 1.2/50 µs
[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
Average coil consumption in VA	1.2 60 Hz
Rated operational voltage limits	96...132 V AC
[Ui] rated insulation voltage	~~250 V IEC~~ ~~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	10 A 250 V AC ~~10 A 28 V DC~~
Operating time	20 ms
Maximum switching capacity	2500 VA/280 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.

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 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	0.082 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	UL 508 IEC 61810-1 CSA C22.2 No 14
Product Certifications	UL Lloyd's CE CSA EAC 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	3389119403665
Returnability	Yes
Country of origin	CN

Packing Units

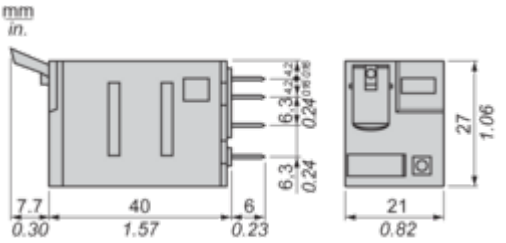
Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	0.984 in (2.500 cm)
Package 1 Width	1.181 in (3.000 cm)
Package 1 Length	1.772 in (4.500 cm)
Package weight(Lbs)	1.305 oz (37.000 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	1.181 in (3.000 cm)
Package 2 Width	4.134 in (10.500 cm)
Package 2 Length	4.921 in (12.500 cm)
Package 2 Weight	13.968 oz (396.000 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	21.497 lb(US) (9.751 kg)

Contractual warranty

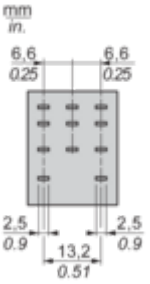
Warranty (in months)	18

Dimensions Drawings

Dimensions

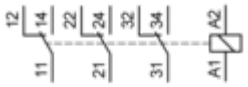


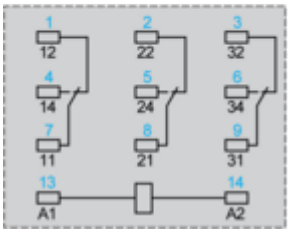
Pin Side View



Connections and Schema

Wiring Diagram



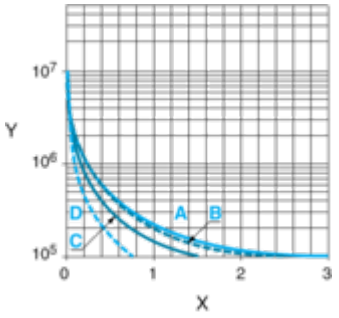


Symbols shown in blue correspond to Nema marking.

Performance Curves

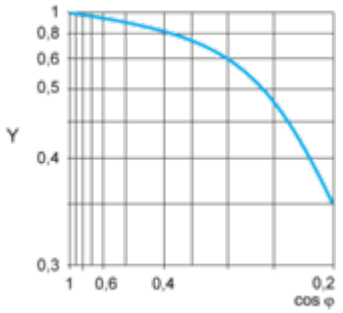
Electrical Durability of Contacts

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



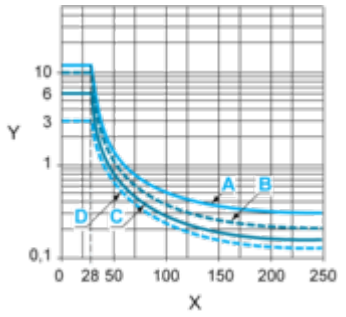
X Switching capacity (kVA)
Y Durability (Number of operating cycles)
A RXM2AB•••
B RXM3AB•••
C RXM4AB•••
D RXM4GB•••

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



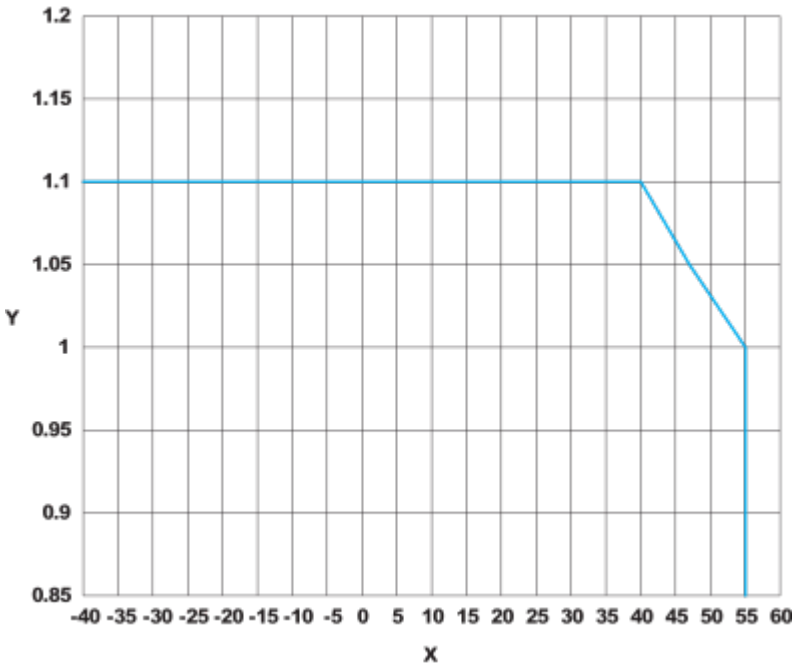
Y Reduction coefficient (A)

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