

# RXM3AB1F7

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



## Main

Range of product	Harmony Electromechanical Relays
Series name	Miniature
Product or component type	Plug-in relay
Device short name	RXM
Contacts type and composition	3 C/O
[Uc] control circuit voltage	120 V AC 50/60 Hz
Status LED	Without
Control type	Lockable test button
Utilisation coefficient	20 %

## Complementary

Shape of pin	Flat
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
[Uimp] rated impulse withstand voltage	4 kV during 1.2/50 µs
Contacts material	AgNi
[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
Continuous output current	6.7 A
Maximum switching voltage	250 V conforming to IEC
Resistive rated load	10 A at 250 V AC 10 A at 28 V DC
Maximum switching capacity	2500 VA/280 W
Minimum switching capacity	170 mW at 10 mA, 17 V
Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles for resistive load
Average coil consumption in VA	1.2 at 60 Hz
Average consumption	1.2 VA at 60 Hz
Drop-out voltage threshold	>= 0.15 Uc
Operate time	20 ms
Release time	20 ms
Average coil resistance	4430 Ohm at 20 °C +/- 15 %
Rated operational voltage limits	96...132 V AC
Safety reliability data	B10d = 100000
Protection category	RT I
Test levels	Level A group mounting
Operating position	Any position
CAD overall height	79 mm

CAD overall depth	78.45 mm
Net weight	0.037 kg
Device presentation	Complete product







## Environment

Dielectric strength	1300 V AC between contacts with micro disconnection 2000 V AC between coil and contact 2000 V AC between poles
Product certifications	UL[RETURN]Lloyd's[RETURN]CE[RETURN]CSA[RETURN]GOST[RETURN]IECEE CB Scheme
Standards	UL 508 IEC 61810-1 CSA C22.2 No 14
Ambient air temperature for storage	-40...85 °C
Ambient air temperature for operation	-40...55 °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
IP degree of protection	IP40 conforming to IEC 60529
Shock resistance	10 gn for in operation 30 gn for not operating
Pollution degree	2

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.500 cm
Package 1 Width	3.000 cm
Package 1 Length	4.500 cm
Package 1 Weight	36.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.000 cm
Package 2 Width	10.000 cm
Package 2 Length	12.500 cm
Package 2 Weight	388.000 g
Unit Type of Package 3	S01
Number of Units in Package 3	120
Package 3 Height	15.000 cm
Package 3 Width	15.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	4.822 kg

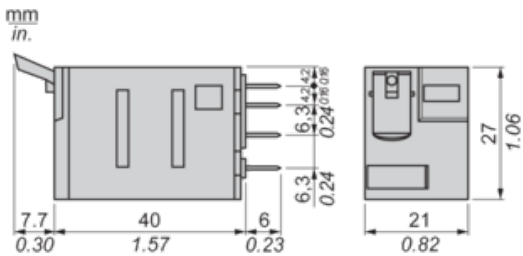
## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a>
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 <a href="#">Yes</a>
Environmental Disclosure	 <a href="#">Product Environmental Profile</a>
Circularity Profile	 <a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

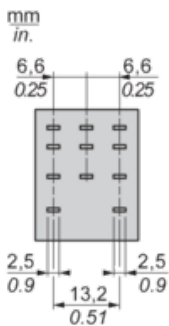
Contractual warranty

Warranty	18 months
----------	-----------

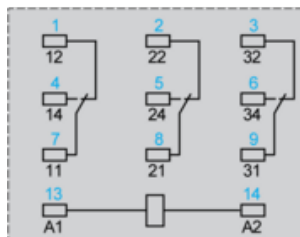
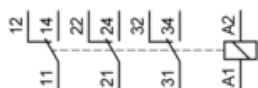
Dimensions



Pin Side View



## Wiring Diagram

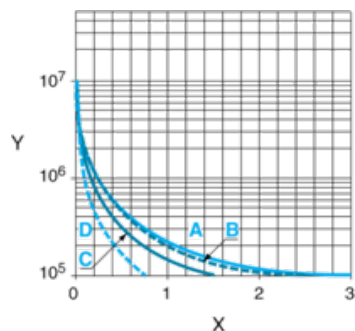


Symbols shown in blue correspond to Nema marking.

## 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...

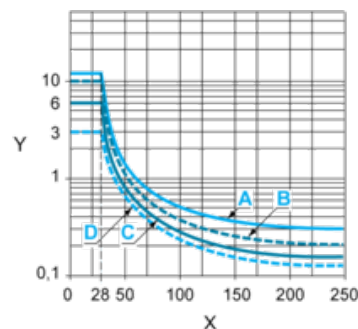
D RXM4GB...

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...

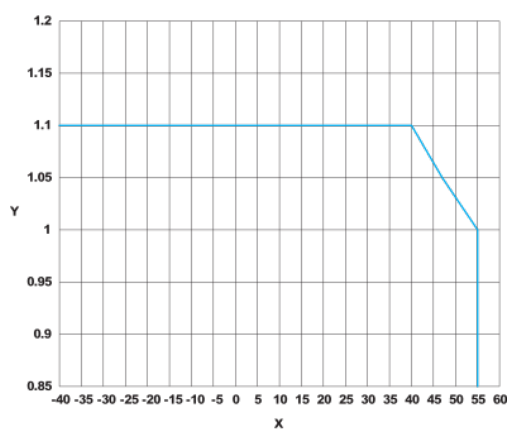
Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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.

---

#### AC Coil Voltage and Operating Temperature under continuous duty



X : Operating temperature (°C)

Y : AC coil voltage (UC)