

Product datasheet

Specifications



Miniature plug-in relay, 6 A, 4 CO, LED, 48 V AC

RXM4AB2E7

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 | 4 C/O |
| [Uc] control circuit voltage | 48 V AC 50/60 Hz |
| Status LED | With |
| 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 | 2.5 kV during 1.2/50 µs |
| Contacts material | AgNi |
| [Ie] rated operational current | 3 A at 28 V (DC) NC conforming to IEC 3 A at 250 V (AC) NC conforming to IEC 6 A at 28 V (DC) NO conforming to IEC 6 A at 250 V (AC) NO conforming to IEC 6 A at 277 V (AC) conforming to UL 8 A at 30 V (DC) conforming to UL |
| Continuous output current | 5 A |
| Maximum switching voltage | 250 V conforming to IEC |
| Resistive rated load | 6 A at 250 V AC 6 A at 28 V DC |
| Maximum switching capacity | 1500 VA/168 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 |
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| Drop-out voltage threshold | >= 0.15 Uc |
| Operate time | 20 ms |
| Release time | 20 ms |
| Average coil resistance | 710 Ohm at 20 °C +/- 15 % |
| Rated operational voltage limits | 38.4...52.8 V AC |
| Safety reliability data | B10d = 100000 |
| Protection category | RT I |
| Test levels | Level A group mounting |
| Operating position | Any position |
| CAD overall height | 82.8 mm |
| CAD overall depth | 80.35 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 with basic insulation 2000 V AC between poles with basic insulation |
| Product certifications | CSA Lloyd's UL GOST CE |
| Standards | CSA C22.2 No 14 UL 508 IEC 61810-1 |
| 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 | 2.000 cm |
| Package 1 Width | 2.200 cm |
| Package 1 Length | 4.300 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 | 10.300 cm |

| | |
|------------------------------|-----------|
| Package 2 Length | 12.800 cm |
| Package 2 Weight | 391.000 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 | 9.842 kg |

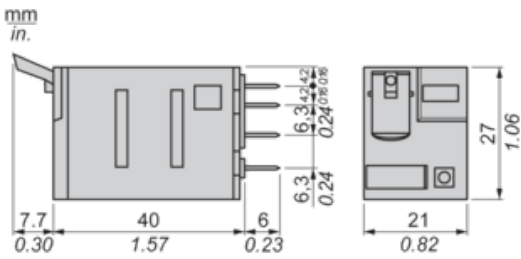
Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

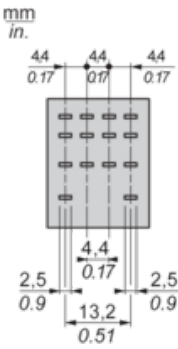
Contractual warranty

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

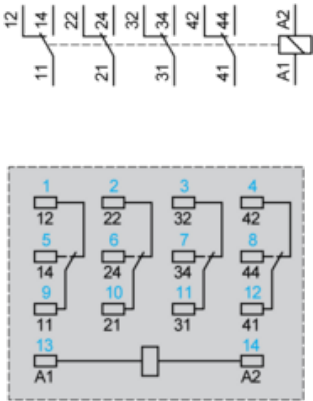
Dimensions



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 φ)



- Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



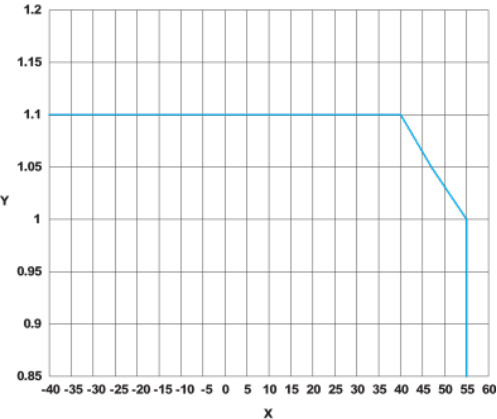
- X Voltage DC
- Y Current DC
- A RXM2AB...
- B RXM3AB...
- C RXM4AB...
- D RXM4GB...

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)

Recommended replacement(s)