Miniature plug in relay, Harmony, 10A, 3CO, lockable test button, 24V DC

RXM3AB1BD

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 | 24 V DC |
| 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 |
| [le] 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 | 0.9 W |
|---------------------------------------|--|
| Drop-out voltage threshold | >= 0.1 Uc |
| Operate time | 20 ms |
| Release time | 20 ms |
| Average coil resistance | 650 Ohm at 20 °C +/- 10 % |
| Rated operational voltage limits | 19.226.4 V DC |
| Safety reliability data | B10d = 100000 |
| Protection category | RTI |
| 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 2000 V AC between poles |
| Product certifications | CSA CE UL Lloyd's GOST |
| Standards | EN/IEC 61810-1 CSA C22.2 No 14 UL 508 |
| Ambient air temperature for storage | -4085 °C |
| Ambient air temperature for operation | -4055 °C |
| Vibration resistance | 3 gn, amplitude = \pm /- 1 mm (f = 10150 Hz)5 cycles in operation 5 gn, amplitude = \pm /- 1 mm (f = 10150 Hz)5 cycles not operating |
| IP degree of protection | IP40 conforming to EN/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 cm |
| Package 1 Width | 2.5 cm |
| Package 1 Length | 5 cm |
| Package 1 Weight | 37 g |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 10 |
| Package 2 Height | 3 cm |
| Package 2 Width | 10 cm |
| Package 2 Length | 12.5 cm |

| Package 2 Weight | 398 g |
|------------------------------|-----------------------|
| Unit Type of Package 3 | S02 |
| Number of Units in Package 3 | 220 |
| Package 3 Height | 15 cm |
| Package 3 Width | 30 cm |
| Package 3 Length | 40 cm |
| Package 3 Weight | 9.005 kg |
| Offer Sustainability | |
| Sustainable offer status | Green Premium product |
| REACh Regulation | REACh Declaration |
| REACh free of SVHC | Yes |

| 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 |
| 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 |

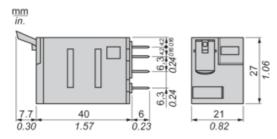
Contractual warranty

Warranty 18 months

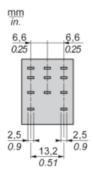
RXM3AB1BD

Dimensions Drawings

Dimensions



Pin Side View

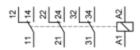


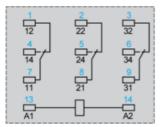
Product data sheet

RXM3AB1BD

Connections and Schema

Wiring Diagram





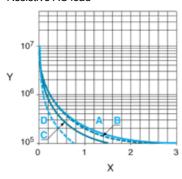
Symbols shown in blue correspond to Nema marking.

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)

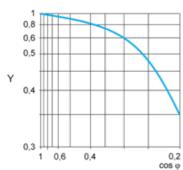
A RXM2AB•••

B RXM3AB•••

C RXM4AB•••

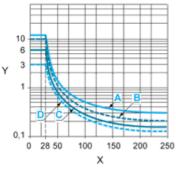
D RXM4GB•••

Reduction coefficient for inductive AC load (depending on power factor $\cos\varphi)$



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC

Y Current DC

A RXM2AB•••

B RXM3AB•••

C RXM4AB•••

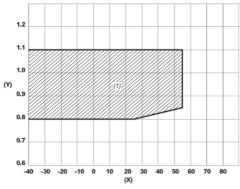
D RXM4GB•••

 $\textbf{Note}: \ \ \text{These are typical curves, actual durability depends on load, environment, duty cycle, etc.}$

Performance Curves

Coil Operating Range

DC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)

Y: AC coil voltage (U/Uc)

(1) Permitted operating range area

Recommended replacement(s)