

# Product data sheet

Specifications



## Harmony, Miniature plug-in relay, 10 A, 3 CO, LED, 48 V DC

RXM3AB2ED

- ❗ Discontinued on: 02 December 2020
- ❗ End-of-service on: 31 December 2020

❗ Discontinued

### Main

|                               |                      |
|-------------------------------|----------------------|
| Range of Product              | Harmony Relay        |
| 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  | 48 V DC              |
| Status LED                    | With                 |
| Control type                  | Lockable test button |
| Utilisation coefficient       | 20 %                 |

### Complementary

|  |   |
|--|---|
| Shape of pin                           | Flat  |
| [Ui] rated insulation voltage          | 250 V IEC<br>300 V CSA<br>300 V UL  |
| [Uimp] rated impulse withstand voltage | 4 kV 1.2/50 µs  |
| Contacts material                      | AgNi  |
| [Ie] rated operational current         | 10 A 28 V DC) NO IEC<br>10 A 250 V AC) NO IEC<br>5 A 28 V DC) NC IEC<br>5 A 250 V AC) NC IEC<br>10 A 30 V DC) UL<br>10 A 277 V AC) UL |
| Continuous output current              | 6.7 A   |
| Maximum switching voltage              | 250 V IEC   |
| Resistive rated load                   | 10 A 250 V AC<br>10 A 28 V DC   |
| Maximum switching capacity             | 2500 VA/280 W   |
| Minimum switching capacity             | 170 mW 10 mA, 17 V  |
| Operating rate                         | <= 1200 cycles/hour under load<br><= 18000 cycles/hour no-load  |
| Mechanical durability                  | 10000000 cycles   |

|                                  |                         |
|----------------------------------|-------------------------|
| Electrical durability            | 100000 cycles resistive |
| Average coil consumption         | 0.9 W                   |
| Drop-out voltage threshold       | >= 0.1 Uc               |
| Operate time                     | 20 ms                   |
| Release time                     | 20 ms                   |
| Average coil resistance          | 2560 Ohm 20 °C +/- 10 % |
| Rated operational voltage limits | 38.4...52.8 V DC        |
| Safety reliability data          | B10d = 100000           |
| Protection category              | RT I                    |
| Test levels                      | Level A group mounting  |
| Operating position               | Any position            |
| CAD overall height               | 3.26 in (82.8 mm)       |
| CAD overall depth                | 3.16 in (80.35 mm)      |
| Net Weight                       | 0.08 lb(US) (0.037 kg)  |
| Device presentation              | Complete product        |

## Environment

|                                       |  |
|---------------------------------------|--|
| Dielectric strength                   | 1300 V AC between contacts with micro disconnection<br>2000 V AC between coil and contact<br>2000 V AC between poles |
| Product Certifications                | GOST<br>CE<br>Lloyd's<br>CSA<br>UL   |
| Standards                             | CSA C22.2 No 14<br>UL 508<br>EN/IEC 61810-1  |
| Ambient Air Temperature for Storage   | -40...185 °F (-40...85 °C)   |
| Ambient air temperature for operation | -40...131 °F (-40...55 °C)   |
| Vibration resistance                  | 3 gn +/- 1 mm 10...150 Hz)5 cycles in operation<br>5 gn +/- 1 mm 10...150 Hz)5 cycles not operating                  |
| IP degree of protection               | IP40 conforming to EN/IEC 60529  |
| Shock resistance                      | 10 gnin operation<br>30 gnnot operating  |
| Pollution degree                      | 2  |

## Ordering and shipping details

|                   |                             |
|-------------------|-----------------------------|
| Category          | 21127-ZELIO ICE CUBE RELAYS |
| Discount Schedule | CP2                         |
| GTIN              | 00785901511465              |
| Returnability     | No                          |
| Country of origin | CN                          |

## Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type of Package 1       | PCE |
| Number of Units in Package 1 | 1   |

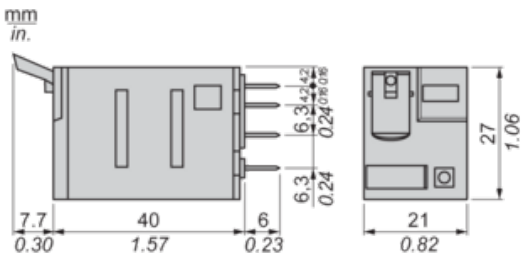
Offer Sustainability

|                           |  |
|---------------------------|--|
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| 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)<br><a href="#">EU RoHS Declaration</a>  |
| China RoHS Regulation     | <a href="#">China RoHS declaration</a>   |
| Environmental Disclosure  | <a href="#">Product Environmental Profile</a>  |
| Circularity Profile       | No need of specific recycling operations   |
| WEEE                      | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.   |

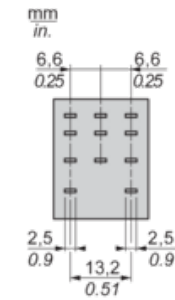
Contractual warranty

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

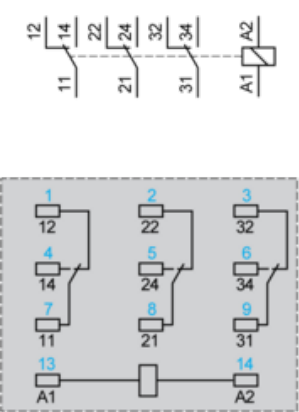
Dimensions



Pin Side View



Wiring Diagram

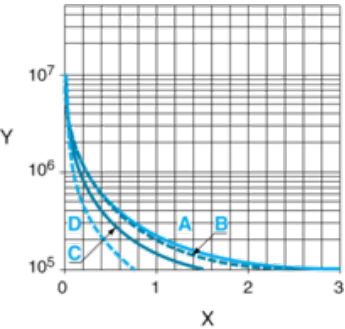


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

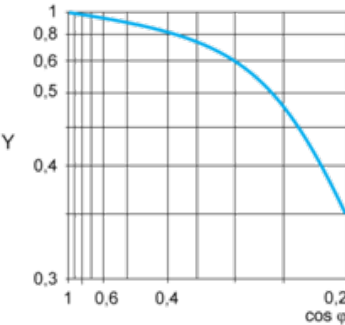
Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



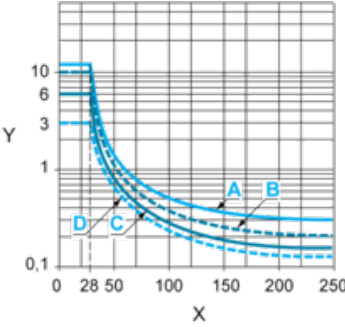
- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)
- A RXM2AB...
- B RXM3AB...
- C RXM4AB...
- D RXM4GB...

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.

Recommended replacement(s)

RXM3AB2ED is replaced by the following product range:



**Harmony Electromechanical Relays**  
Slim Interface, Miniature, Power, and Universal Relays  
Products: 460