

# RXM4AB1BD

miniature plug in relay, Harmony  
Electromechanical Relays, 6A, 4CO, lockable  
test but to n, 24V DC



## 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  | 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 IEC<br>300 V CSA<br>300 V UL                                                                                                |
| [Uimp] rated impulse withstand voltage | 2.5 kV 1.2/50 µs                                                                                                                  |
| Contacts material                      | AgNi                                                                                                                              |
| [Ie] rated operational current         | 3 A 28 V DC) NC IEC<br>3 A 250 V AC) NC IEC<br>6 A 28 V DC) NO IEC<br>6 A 250 V AC) NO IEC<br>6 A 277 V AC) UL<br>8 A 30 V DC) UL |
| Continuous output current              | 5 A                                                                                                                               |
| Maximum switching voltage              | 250 V IEC                                                                                                                         |
| Resistive rated load                   | 6 A 250 V AC<br>6 A 28 V DC                                                                                                       |
| Maximum switching capacity             | 1500 VA/168 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                | 650 Ohm 20 °C +/- 10 %                                                                                                            |
| Rated operational voltage limits       | 19.2...26.4 V DC                                                                                                                  |
| Safety reliability data                | B10d = 100000                                                                                                                     |
| Protection category                    | RT I                                                                                                                              |
| Test levels                            | Level A group mounting                                                                                                            |
| Operating position                     | Any position                                                                                                                      |
| CAD overall height                     | 3.11 in (79 mm)                                                                                                                   |
| CAD overall depth                      | 3.09 in (78.45 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 with basic insulation<br>2000 V AC between poles with basic insulation |
| Product Certifications                | UL[RETURN]CE[RETURN]GOST[RETURN]CSA[RETURN]Lloyd's                                                                                                               |
| Standards                             | UL 508<br>IEC 61810-1<br>CSA C22.2 No 14                                                                                                                         |
| 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 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              | 3389119403719               |
| Returnability     | Yes                         |
| Country of origin | ID                          |

## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Number of Units in Package 1 | 1                       |
| Package 1 Height             | 0.83 in (2.100 cm)      |
| Package 1 Width              | 1.06 in (2.700 cm)      |
| Package 1 Length             | 1.89 in (4.800 cm)      |
| Package 1 Weight             | 1.23 oz (35.000 g)      |
| Unit Type of Package 2       | BB1                     |
| Number of Units in Package 2 | 10                      |
| Package 2 Height             | 1.18 in (3.000 cm)      |
| Package 2 Width              | 4.02 in (10.200 cm)     |
| Package 2 Length             | 4.96 in (12.600 cm)     |
| Package 2 Weight             | 13.44 oz (381.000 g)    |
| Unit Type of Package 3       | S02                     |
| Number of Units in Package 3 | 240                     |
| Package 3 Height             | 5.91 in (15.000 cm)     |
| Package 3 Width              | 11.81 in (30.000 cm)    |
| Package 3 Length             | 15.75 in (40.000 cm)    |
| Package 3 Weight             | 21.21 lb(US) (9.620 kg) |

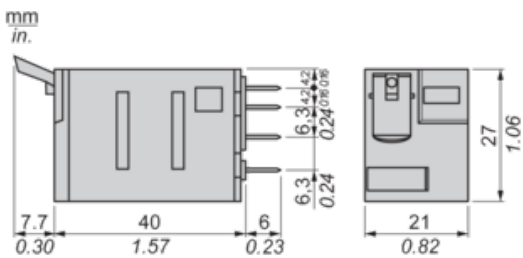
## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                                                                                                  |
| 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) <a href="#">EU RoHS Declaration</a>                                                                                                                                                                                                                                                                         |
| Toxic heavy metal free     | Yes                                                                                                                                                                                                                                                                                                                                                                    |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                                                                                                    |
| 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.                                                                                                                                                                                                                                           |

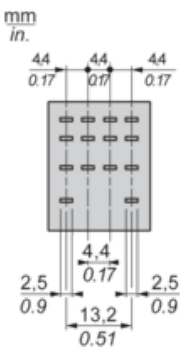
## Contractual warranty

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

Dimensions



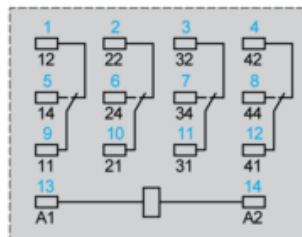
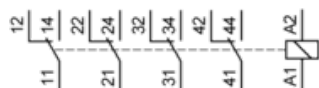
Pin Side View



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Wiring Diagram

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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...

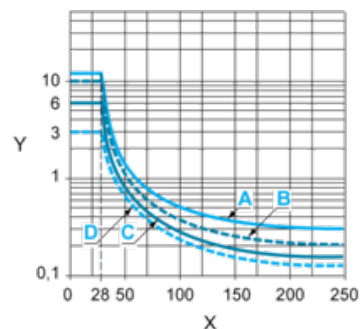
D RXM4GB...

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.

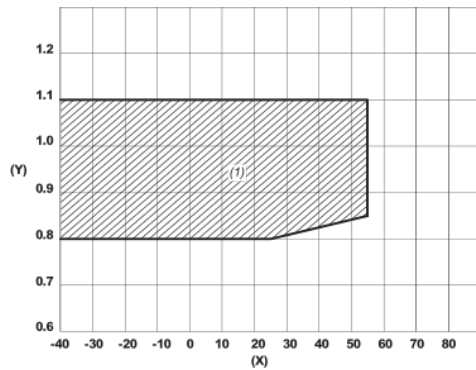
For inductive load, to increase relay life cycles, please add a proper load protection circuit (eg: RC protection/Varistor/free Wheeling diode - DC load only- ).

For low level loads (below 10mA), we recommend to use RXM\*GB series with bifurcated contacts relays instead.

## Coil Operating Range

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### DC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)

Y : AC coil voltage (U/Uc)

(1) Permitted operating range area