

# Product data sheet

Specifications



plug-in relay, Harmony  
electromechanical relays, 15A, 4CO,  
with LED, lockable test button, 48V  
DC

RPM42ED

Product availability : Stock - Normally stocked in distribution facility

Price\* : 15.74 USD

## Main

|  |                                  |
|--|----------------------------------|
| Range of Product                             | Harmony Electromechanical Relays |
| Series name                                  | Power                            |
| Product or Component Type                    | Plug-in relay                    |
| Device short name                            | RPM                              |
| Contacts type and composition                | 4 C/O                            |
| [Uc] control circuit voltage                 | 48 V DC                          |
| [Ithe] conventional enclosed thermal current | 15 A -40...131 °F (-40...55 °C)  |
| 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         | 15 A 277 V AC) UL<br>15 A 28 V DC) UL<br>15 A 250 V AC) NO IEC<br>15 A 28 V DC) NO IEC<br>7.5 A 250 V AC) NC IEC<br>7.5 A 28 V DC) NC IEC |
| Maximum switching voltage              | 250 V IEC   |
| Resistive load current                 | 15 A 250 V AC<br>15 A 28 V DC   |
| Maximum switching capacity             | 3750 VA<br>420 W  |
| Minimum switching capacity             | 170 mW 10 mA, 17 V  |
| Operating rate                         | <= 1200 cycles/hour under load<br><= 18000 cycles/hour no-load  |

\* Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                  |                                    |
|----------------------------------|------------------------------------|
| Mechanical durability            | 10000000 cycles                    |
| Electrical durability            | 100000 cycles resistive            |
| Average coil consumption         | 1.6 W                              |
| Drop-out voltage threshold       | >= 0.1 Uc DC                       |
| Operate time                     | 20 ms at nominal voltage           |
| Release time                     | 20 ms at nominal voltage           |
| Average coil resistance          | 1210 Ohm at 68 °F (20 °C) +/- 10 % |
| Rated operational voltage limits | 38.4...52.8 V DC                   |
| Protection category              | RT I                               |
| Test levels                      | Level A group mounting             |
| Operating position               | Any position                       |
| Pollution degree                 | 3                                  |
| Safety reliability data          | B10d = 100000                      |
| Net Weight                       | 0.16 lb(US) (0.071 kg)             |
| Device presentation              | Complete product                   |

## Environment

|                                       |   |
|---------------------------------------|---|
| Dielectric strength                   | 1500 V AC between contacts with micro disconnection<br>2000 V AC between coil and contact with reinforced<br>2000 V AC between poles with basic |
| Standards                             | CSA C22.2 No 14<br>IEC 61810-1<br>UL 508  |
| Product Certifications                | CSA<br>UL<br>EAC  |
| 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   |
| Degree of protection (Housing only)   | IP40 conforming to IEC 60529  |
| Shock resistance                      | 15 gnin operation<br>30 gnnot operating   |

## Ordering and shipping details

|                   |                             |
|-------------------|-----------------------------|
| Category          | 21127-ZELIO ICE CUBE RELAYS |
| Discount Schedule | CP2                         |
| GTIN              | 3389119402231               |
| Returnability     | No                          |
| Country of origin | CN                          |

## Packing Units

|                              |                  |
|------------------------------|------------------|
| Unit Type of Package 1       | PCE              |
| Number of Units in Package 1 | 1                |
| Package 1 Height             | 1.10 in (2.8 cm) |
| Package 1 Width              | 1.57 in (4 cm)   |

|                              |                        |
|------------------------------|------------------------|
| Package 1 Length             | 1.85 in (4.7 cm)       |
| Package 1 Weight             | 2.68 oz (76 g)         |
| Unit Type of Package 2       | BB1                    |
| Number of Units in Package 2 | 10                     |
| Package 2 Height             | 1.22 in (3.1 cm)       |
| Package 2 Width              | 4.13 in (10.5 cm)      |
| Package 2 Length             | 8.90 in (22.6 cm)      |
| Package 2 Weight             | 26.88 oz (762 g)       |
| Unit Type of Package 3       | S01                    |
| Number of Units in Package 3 | 40                     |
| Package 3 Height             | 5.91 in (15 cm)        |
| Package 3 Width              | 5.91 in (15 cm)        |
| Package 3 Length             | 15.75 in (40 cm)       |
| Package 3 Weight             | 7.39 lb(US) (3.354 kg) |

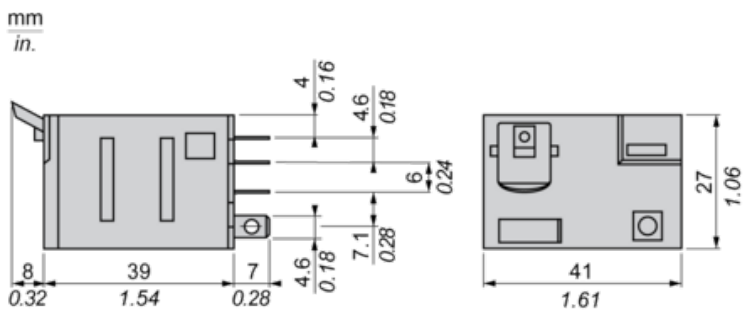
### Offer Sustainability

|                           |  |
|---------------------------|--|
| 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.   |

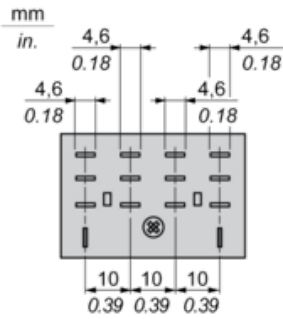
### Contractual warranty

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

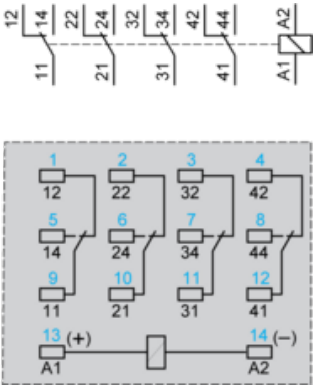
Dimensions



Pin Side View



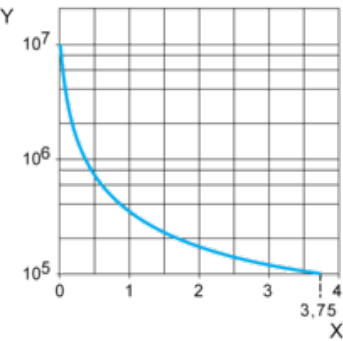
Wiring Diagram



Electrical Durability of Contacts

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

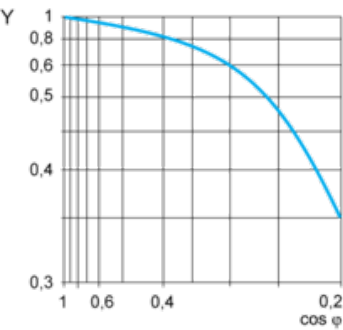
Resistive AC load



X Switching capacity (kVA)

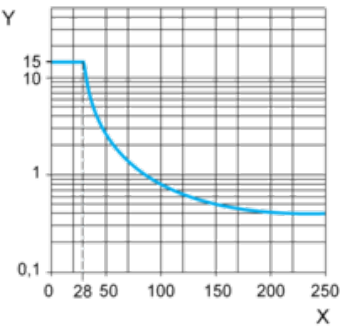
Y Durability (Number of operating cycles)

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

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

Recommended replacement(s)