# **Product data sheet**

Specification





## plug-in relay, Harmony electromechanical relays, 15A, 2CO, lockable test button, 24V DC

RPM21BD

Product availability: Stock - Normally stocked in distribution

Price\*: 7.32 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                   | 2 C/O                            |  |
| [Uc] Control Circuit Voltage                    | 24 V DC                          |  |
| [Ithe] Conventional Enclosed<br>Thermal Current | 15 A -40131 °F (-4055 °C)        |  |
| Status Led                                      | Without                          |  |
| Control Type                                    | Lockable test button             |  |
| Utilisation Coefficient                         | 20 %                             |  |

#### **Complementary**

| 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                                                                                                                                      |
| [le] 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                                                                            |
| Mechanical Durability                  | 10000000 cycles                                                                                                                           |
| Electrical Durability                  | 100000 cycles resistive                                                                                                                   |

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

| Average Coil Consumption         | 0.85 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          | 640 Ohm at 68 °F (20 °C) +/- 10 % |  |
| Rated Operational Voltage Limits | 19.226.4 V DC                     |  |
| Protection Category              | RTI                               |  |
| Test Levels                      | Level A group mounting            |  |
| Operating Position               | Any position                      |  |
| Pollution Degree                 | 3                                 |  |
| Safety Reliability Data          | B10d = 100000                     |  |
| Net Weight                       | 0.08 lb(US) (0.036 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                             | IEC 61810-1<br>CSA C22.2 No 14<br>UL 508                                                                                                        |
| Product Certifications                | EAC<br>CSA<br>UL                                                                                                                                |
| Ambient Air Temperature For Storage   | -40185 °F (-4085 °C)                                                                                                                            |
| Ambient Air Temperature For Operation | -40131 °F (-4055 °C)                                                                                                                            |
| Vibration Resistance                  | 3 gn +/- 1 mm 10150 Hz)5 cycles in operation<br>5 gn +/- 1 mm 10150 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          | US10CP221127  |
|-------------------|---------------|
| Discount Schedule | 0CP2          |
| Gtin              | 3389119401814 |
| Returnability     | Yes           |
| Country Of Origin | CN            |

# **Packing Units**

| Unit Type Of Package 1       | PCE              |  |
|------------------------------|------------------|--|
| Number Of Units In Package 1 | 1                |  |
| Package 1 Height             | 1.85 in (4.7 cm) |  |
| Package 1 Width              | 0.83 in (2.1 cm) |  |
| Package 1 Length             | 1.10 in (2.8 cm) |  |

| Package 1 Weight             | 1.38 oz (39 g)          |
|------------------------------|-------------------------|
| Unit Type Of Package 2       | BB1                     |
| Number Of Units In Package 2 | 10                      |
| Package 2 Height             | 1.26 in (3.2 cm)        |
| Package 2 Width              | 4.06 in (10.3 cm)       |
| Package 2 Length             | 4.84 in (12.3 cm)       |
| Package 2 Weight             | 14.18 oz (402 g)        |
| Unit Type Of Package 3       | S02                     |
| Number Of Units In Package 3 | 240                     |
| Package 3 Height             | 5.91 in (15 cm)         |
| Package 3 Width              | 11.81 in (30 cm)        |
| Package 3 Length             | 15.75 in (40 cm)        |
| Package 3 Weight             | 22.51 lb(US) (10.21 kg) |

# **Contractual warranty**

Warranty 18 months

## Sustainability Green Premium\*

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

### Well-being performance



Reach Free Of Svhc



Rohs Exemption Information

Yes

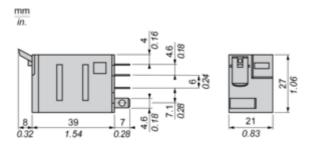
### **Certifications & Standards**

| Reach Regulation          | REACh Declaration                                                                                                                                                                                                                                                                                                          |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration                                                                                                                                                                                                                                             |
| China Rohs Regulation     | China RoHS declaration                                                                                                                                                                                                                                                                                                     |
| Environmental Disclosure  | Product Environmental Profile                                                                                                                                                                                                                                                                                              |
| Weee                      | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.                                                                                                                                                                                               |
| Circularity Profile       | No need of specific recycling operations                                                                                                                                                                                                                                                                                   |
| 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 |

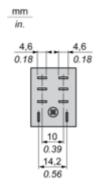
### RPM21BD

#### **Dimensions Drawings**

#### **Dimensions**



#### Pin Side View

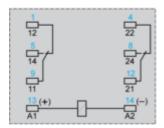


### RPM21BD

Connections and Schema

### Wiring Diagram





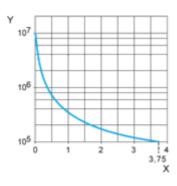
Symbols shown in blue correspond to Nema marking.

#### RPM21BD

#### Performance Curves

#### **Electrical Durability of Contacts**

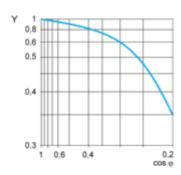
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

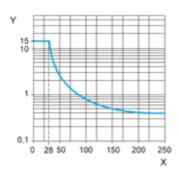
Y Durability (Number of operating cycles)

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.