

power plug in relay, Harmony Electromechanical Relays, 15A, 2CO, without LED, with lockable test button, 24V DC

RPM21BD

#### Main

| Mairi  |                                  |  |
|--|----------------------------------|--|
| Range of product                             | Harmony Electromechanical Relays |  |
| Series name                                  | RPM series                       |  |
| Product or component type                    | Plug-in relay                    |  |
| Contacts type and composition                | 2 C/O                            |  |
| Relay type                                   | Power relay                      |  |
| status LED                                   | Without                          |  |
| [Uc] control circuit voltage                 | 24 V DC                          |  |
| Minimum switching capacity                   | 170 mW at 10 mA, 17 V            |  |
| Release time                                 | 20 ms at nominal voltage         |  |
| Ambient air temperature for operation        | -4055 °C                         |  |
| [Ithe] conventional enclosed thermal current | 15 A at -4055 °C                 |  |

# Complementary

| Control type                        | Lockable test button                     |  |
|-------------------------------------|--|--|
| [le] rated operational current      | 15 A at 277 V (AC) conforming to UL      |  |
|                                     | 15 A at 28 V (DC) conforming to UL       |  |
|                                     | 15 A at 250 V (AC) NO conforming to IEC  |  |
|                                     | 15 A at 28 V (DC) NO conforming to IEC   |  |
|                                     | 7.5 A at 250 V (AC) NC conforming to IEC |  |
|                                     | 7.5 A at 28 V (DC) NC conforming to IEC  |  |
| Degree of protection (Housing only) | IP40 conforming to IEC 60529             |  |
| Rated operational voltage limits    | 19.226.4 V DC                            |  |
| [Ui] rated insulation voltage       | 250 V conforming to IEC                  |  |
|                                     | 300 V conforming to CSA                  |  |
|                                     | 300 V conforming to UL                   |  |
| Maximum switching voltage           | 250 V conforming to IEC                  |  |
| Drop-out voltage threshold          | >= 0.1 Uc DC                             |  |
| Maximum switching capacity          | 3750 VA                                  |  |
|                                     | 420 W                                    |  |
| Mechanical durability               | 10000000 cycles                          |  |
| Electrical durability               | 100000 cycles for resistive load         |  |
| Safety reliability data             | B10d = 100000                            |  |
| Operating rate                      | <= 1200 cycles/hour under load           |  |
|                                     | <= 18000 cycles/hour no-load             |  |
| Utilisation coefficient             | 20 %                                     |  |

| 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 |  |
|--|---|--|
| [Uimp] rated impulse withstand voltage | 4 kV during 1.2/50 μs   |  |
| Protection category                    | RTI   |  |
| Mounting support                       | Plug-in   |  |
| Operating position                     | Any position  |  |
| Test levels                            | Level A group mounting  |  |
| Device presentation                    | Complete product  |  |
| Contacts material                      | AgNi  |  |
| Shape of pin                           | Flat (faston type)  |  |
| Product weight                         | 0.036 kg  |  |

# **Environment**

| Pollution degree                    | 3  |  |
|-------------------------------------|--|--|
| 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 | -4085 °C   |  |
| Vibration resistance                | 3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation 5 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles not operating |  |
| Shock resistance                    | 15 gn for in operation<br>30 gn for not operating  |  |

# **Packing Units**

| PCE     |
|---------|
| 1       |
| 4.7 cm  |
| 2.1 cm  |
| 2.8 cm  |
| 39 g    |
| BB1     |
| 10      |
| 3.2 cm  |
| 10.3 cm |
| 12.3 cm |
| 402 g   |
| S02     |
| 240     |
| 15 cm   |
| 30 cm   |
| 40 cm   |
|         |

Package 3 Weight 10.21 kg

# **Contractual warranty**

Warranty 18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

| <b>⊘</b> Environmental footprint |    |  |
|----------------------------------|----|--|
| Total lifecycle Carbon footprint | 12 |  |

#### Use Better

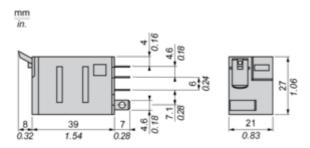
| Materials and Substances               |  |  |
|--|--|--|
| Packaging made with recycled cardboard | Yes  |  |
| Packaging without single use plastic   | Yes  |  |
| EU RoHS Directive                      | Pro-active compliance (Product out of EU RoHS legal scope)   |  |
| California proposition 65              | 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 |  |

#### **Use Again**

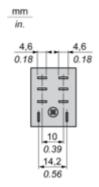
| ○ Repack and remanufacture      |  |
|---------------------------------|--|
| End of life manual availability | No need of specific recycling operations |
| Take-back                       | No                                       |

## **Dimensions Drawings**

#### **Dimensions**



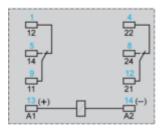
#### Pin Side View



Connections and Schema

## Wiring Diagram



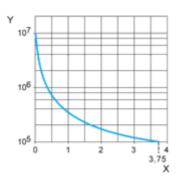


Symbols shown in blue correspond to Nema marking.

#### Performance Curves

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

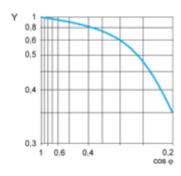
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

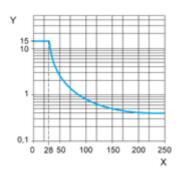
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor cos φ)



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



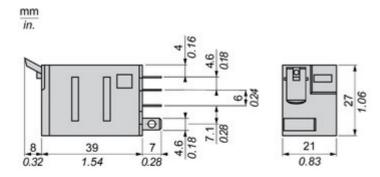
**X** Voltage DC

Y Current DC

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

### **Technical Illustration**

#### **Dimensions**



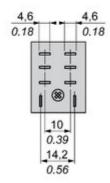


Image of product / Alternate images

#### **Alternative**



