# Product data sheet

Specifications




## plug-in relay, Harmony electromechanical relays, 15A, 1CO, with LED, lockable test button, 24V DC

RPM12BD

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Range of Product** | Harmony Electromechanical Relays |
| **Series name** | RPM series |
| **Product or Component Type** | Plug-in relay |
| **Contacts type and composition** | 1 C/O |
| **Relay Type** | Power relay |
| **Status LED** | With |
| **[Uc] control circuit voltage** | 24 V DC |
| **Minimum switching capacity** | 170 mW 10 mA, 17 V |
| **Release time** | 20 ms at nominal voltage |
| **Ambient air temperature for operation** | -40…131 °F (-40…55 °C) |
| **[Ithe] conventional enclosed thermal current** | 15 A -40…131 °F (-40…55 °C) |

## Complementary

| | |
|---|---|
| **Control Type** | Lockable test button |
| **[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 |
| **Degree of protection (Housing only)** | IP40 conforming to IEC 60529 |
| **Rated operational voltage limits** | 19.2...26.4 V DC |
| **[Ui] rated insulation voltage** | 250 V IEC<br>300 V CSA<br>300 V UL |
| **Maximum switching voltage** | 250 V IEC |
| **Drop-out voltage threshold** | >= 0.1 Uc DC |
| **Average coil consumption** | 1.1 W |
| **Average resistance** | 450 Ohm at 68 °F (20 °C) +/- 10 % |
| **Maximum switching capacity** | 3750 VA<br>420 W |
| **Load current** | 15 A 250 V AC<br>15 A 28 V DC |
| **Operating time** | 20 ms at nominal voltage |

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 |
| **Safety reliability data** | B10d = 100000 |
| **Operating rate** | <= 1200 cycles/hour under load<br><= 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 |
| **[Uimp] rated impulse withstand voltage** | 4 kV 1.2/50 µs |
| **Protection category** | RT I |
| **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) |
| **Net Weight** | 0.057 lb(US) (0.026 kg) |

## Environment

| | |
|---|---|
| **Pollution degree** | 3 |
| **Standards** | IEC 61810-1<br>UL 508<br>CSA C22.2 No 14 |
| **Product Certifications** | CSA<br>EAC<br>UL |
| **Ambient Air Temperature for Storage** | -40…185 °F (-40…85 °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 |
| **Shock resistance** | 15 gnin operation<br>30 gnnot operating |

## Ordering and shipping details

| | |
|---|---|
| **Category** | US10CP221127 |
| **Discount Schedule** | 0CP2 |
| **GTIN** | 3389119401739 |
| **Returnability** | Yes |
| **Country of origin** | CN |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 0.551 in (1.400 cm) |
| **Package 1 Width** | 1.024 in (2.600 cm) |
| **Package 1 Length** | 1.535 in (3.900 cm) |

| | |
|---|---|
| **Package weight(Lbs)** | 0.847 oz (24.000 g) |
| **Unit Type of Package 2** | BB1 |
| **Number of Units in Package 2** | 10 |
| **Package 2 Height** | 1.299 in (3.300 cm) |
| **Package 2 Width** | 3.268 in (8.300 cm) |
| **Package 2 Length** | 4.331 in (11.000 cm) |
| **Package 2 Weight** | 9.665 oz (274.000 g) |
| **Unit Type of Package 3** | S02 |
| **Number of Units in Package 3** | 360 |
| **Package 3 Height** | 5.9 in (15 cm) |
| **Package 3 Width** | 11.8 in (30 cm) |
| **Package 3 Length** | 15.7 in (40 cm) |
| **Package 3 Weight** | 22.888 lb(US) (10.382 kg) |

## Contractual warranty

| | |
|---|---|
| **Warranty (in months)** | 18 |

## Environmental Data

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 >

### Environmental footprint

| | |
|---|---|
| Total lifecycle Carbon footprint | **14 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **0.3 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **14 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **0 kg CO2 eq.** |
| Environmental Disclosure | **Product Environmental Profile** |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **Yes** |
| EU RoHS Directive | **Compliant** |
| REACh Regulation | **Free of Substances of Very High Concern above the threshold** |
| 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** |

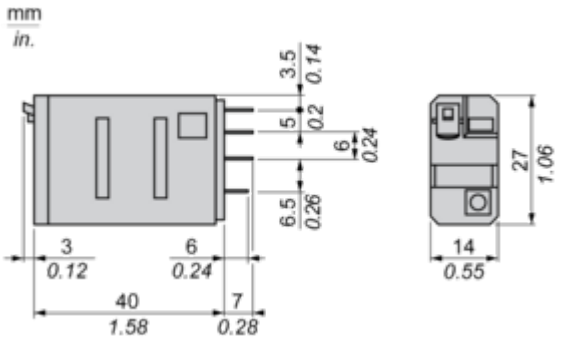
## Use Again

### Repack and remanufacture

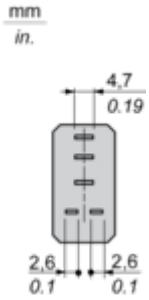
| | |
|---|---|
| Recyclability potential, in % | **67** |
| Circularity Profile | **No need of specific recycling operations** |
| Take-back | **No** |

Dimensions Drawings

## Dimensions



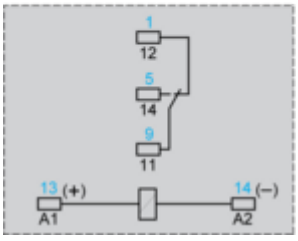

Pin Side View



## Connections and Schema

### Wiring Diagram



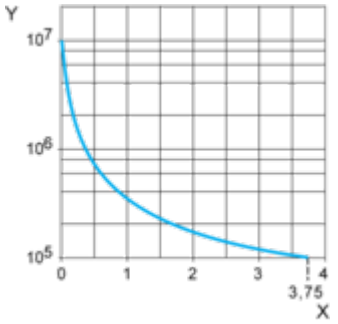




Symbols shown in blue correspond to Nema marking.

## Performance Curves

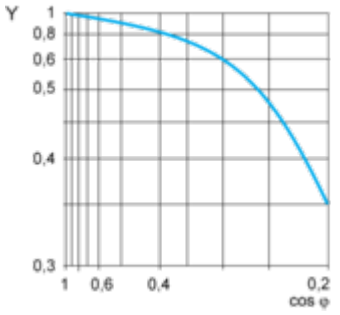
### Electrical Durability of Contacts

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



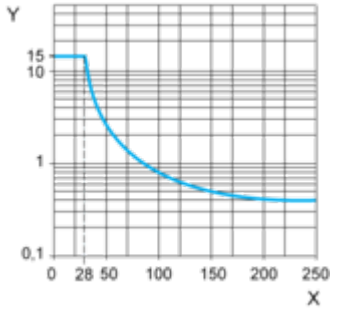

**X** Switching capacity (kVA)
**Y** Durability (Number of operating cycles)

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




**Y** Reduction coefficient (A)

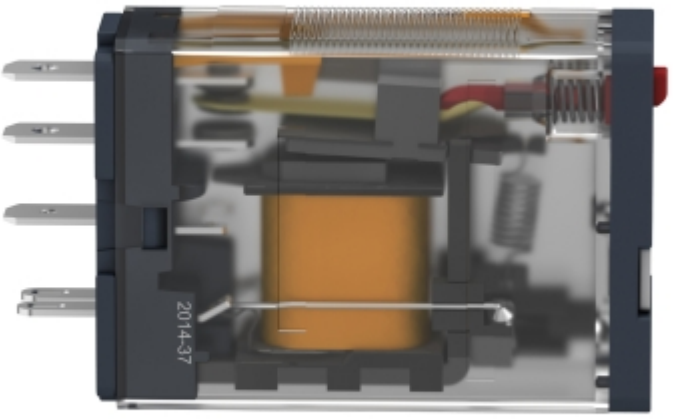
Maximum switching capacity on resistive DC load




**X** Voltage DC
**Y** Current DC
**Note :** These are typical curves, actual durability depends on load, environment, duty cycle, etc.

Image of product / Alternate images

**Alternative**









Schneider
Electric
RPM


1
5
9
13
14

