Product data sheet

Specification





Power plug in relay, Harmony, 15A, 3CO, lockable test button, 110V DC

RPM31FD

Discontinued on: Jan 23, 2021



Product availability: Non-Stock - Not normally stocked in distribution facility

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 | 3 C/O |
| [Uc] Control Circuit Voltage | 110 V DC |
| [Ithe] Conventional Enclosed Thermal Current | 15 A -40131 °F (-4055 °C) |
| Status Led | Without |
| Control Type | Lockable test button |
| Utilisation Coefficient | 20 % |

Complementary

| Shape Of Pin | Flat |
|--|--------------------------------|
| [Ui] Rated Insulation Voltage | 250 V IEC |
| | 300 V CSA |
| | 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 |
| | 15 A 28 V DC) UL |
| | 15 A 250 V AC) NO IEC |
| | 15 A 28 V DC) NO IEC |
| | 7.5 A 250 V AC) NC IEC |
| | 7.5 A 28 V DC) NC IEC |
| Maximum Switching Voltage | 250 V IEC |
| Resistive Load Current | 15 A 250 V AC |
| | 15 A 28 V DC |
| Maximum Switching Capacity | 3750 VA |
| | 420 W |
| Minimum Switching Capacity | 170 mW 10 mA, 17 V |
| Operating Rate | <= 1200 cycles/hour under load |
| | <= 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 | 1.5 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 | 6720 Ohm at 68 °F (20 °C) +/- 10 % |
| Rated Operational Voltage Limits | 88121 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 | 0.12 lb(US) (0.054 kg) |
| Device Presentation | Complete product |

Environment

| Dielectric Strength | 1500 V AC between contacts with micro disconnection 2000 V AC between coil and contact with reinforced 2000 V AC between poles with basic |
|---------------------------------------|---|
| Standards | EN/IEC 61810-1 CSA C22.2 No 14 UL 508 |
| Product Certifications | EAC CSA 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 5 gn +/- 1 mm 10150 Hz)5 cycles not operating |
| Degree Of Protection (Housing Only) | IP40 conforming to EN/IEC 60529 |
| Shock Resistance | 15 gnin operation 30 gnnot operating |

Ordering and shipping details

| Category | US10CP221127 |
|-------------------|---------------|
| Discount Schedule | 0CP2 |
| Gtin | 3389119402019 |
| 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 | 1.22 in (3.1 cm) |
| Package 1 Length | 1.85 in (4.7 cm) |

| Package 1 Weight | 2.05 oz (58 g) |
|------------------------------|-------------------------|
| Unit Type Of Package 2 | BB1 |
| Number Of Units In Package 2 | 10 |
| Package 2 Height | 1.18 in (3 cm) |
| Package 2 Width | 4.13 in (10.5 cm) |
| Package 2 Length | 7.09 in (18 cm) |
| Package 2 Weight | 20.49 oz (581 g) |
| Unit Type Of Package 3 | S01 |
| Number Of Units In Package 3 | 80 |
| 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 | 10.97 lb(US) (4.977 kg) |

Contractual warranty

Warranty 18 months

Sustainability Green Premium

Green PremiumTM **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-CO₂ 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

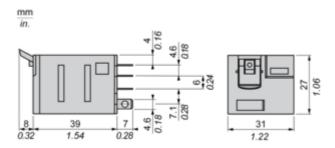
Certifications & Standards

| 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 |

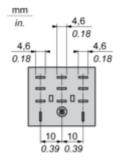
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Dimensions Drawings

Dimensions



Pin Side View

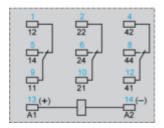


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Connections and Schema

Wiring Diagram





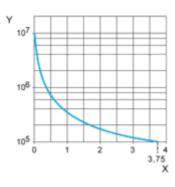
Symbols shown in blue correspond to Nema marking.

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Performance Curves

Electrical Durability of Contacts

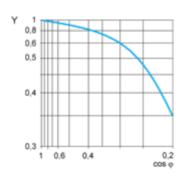
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

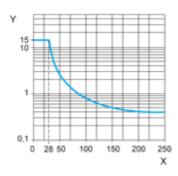
Y Durability (Number of operating cycles)

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.