

RUMF31JD

Harmony, Universal plug-in relay, 10 A, 3 CO, with lockable test button, flat (faston) terminals, 12 V DC



Main

| | |
|---|----------------------------------|
| Range of Product | Harmony Electromechanical Relays |
| Series name | Universal |
| Product or Component Type | Plug-in relay |
| Device short name | RUM |
| Contacts type and composition | 3 C/O |
| [Uc] control circuit voltage | 12 V DC |
| [the] conventional enclosed thermal current | 10 A -40...131 °F (-40...55 °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 |
| [Ie] rated operational current | 10 A at 277 V AC conforming to UL 10 A at 30 V DC conforming to UL 10 A at 277 V AC (same polarity) conforming to CSA 10 A at 30 V DC conforming to CSA 5 A at 250 V AC (NC) conforming to IEC 5 A at 28 V DC (NC) conforming to IEC 10 A at 250 V AC (NO) conforming to IEC 10 A at 28 V DC (NO) conforming to IEC |
| Maximum switching voltage | 250 V IEC |
| Resistive rated load | 10 A 250 V AC 10 A 28 V DC |
| Maximum switching capacity | 2500 VA/280 W |
| Minimum switching capacity | 170 mW 10 mA, 17 V |
| Operating rate | <= 18000 cycles/hour no-load <= 1200 cycles/hour under load |
| Mechanical durability | 5000000 cycles |
| Electrical durability | 100000 cycles resistive |
| Average coil consumption in W | 1.4 W |
| Drop-out voltage threshold | >= 0.1 U _c DC |
| Operate time | 20 ms at nominal voltage |
| Release time | 20 ms at nominal voltage |
| Average coil resistance | 120 Ohm 20 °C +/- 15 % |
| Rated operational voltage limits | 9.6...13.2 V DC |
| Protection category | RT I |
| Test levels | Level A |
| Safety reliability data | B10d = 100000 |
| Operating position | Any position |

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| | |
|---------------------|------------------------|
| Net Weight | 0.19 lb(US) (0.086 kg) |
| Device presentation | Complete product |

Environment

| | |
|---------------------------------------|---|
| Dielectric strength | 1500 V AC between contacts with micro disconnection 2500 V AC between coil and contact with reinforced 2000 V AC between poles with basic |
| Product Certifications | CSA EAC UL |
| Standards | EN/IEC 61810-1 UL 508 CSA C22.2 No 14 |
| 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 4 gn +/- 1 mm 10...150 Hz)5 cycles not operating |
| IP degree of protection | IP40 |
| Shock resistance | 10 gn 11 ms) in operation EN/IEC 60068-2-27 10 gn 11 ms) not operating EN/IEC 60068-2-27 |
| Pollution degree | 3 |

Ordering and shipping details

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|-----------------------|-------------------------------|
| Category | 21127 - ZELIO ICE CUBE RELAYS |
| Discount Schedule | CP2 |
| GTIN | 3606480627422 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 3.25 oz (92 g) |
| Returnability | No |
| Country of origin | CN |

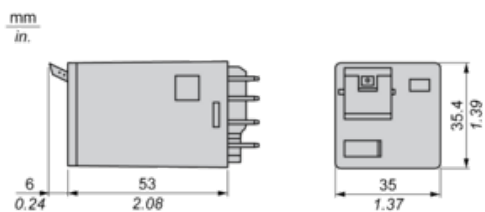
Packing Units

| | |
|------------------------------|-------------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 1.46 in (37 mm) |
| Package 1 width | 1.50 in (38 mm) |
| Package 1 Length | 2.83 in (72 mm) |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 10 |
| Package 2 Weight | 31.53 oz (894 g) |
| Package 2 Height | 1.50 in (3.8 cm) |
| Package 2 width | 5.20 in (13.2 cm) |
| Package 2 Length | 7.87 in (20 cm) |
| Unit Type of Package 3 | S02 |
| Number of Units in Package 3 | 60 |
| Package 3 Weight | 13.15 lb(US) (5.966 kg) |
| Package 3 Height | 5.91 in (15 cm) |
| Package 3 width | 11.81 in (30 cm) |
| Package 3 Length | 15.75 in (40 cm) |

Offer Sustainability

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|----------------------------|--|
| Sustainable offer status | Green Premium product |
| 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 |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |

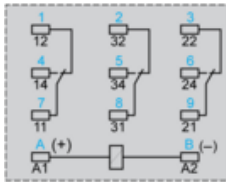
Dimensions



Wiring Diagram



Wiring Diagram



Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

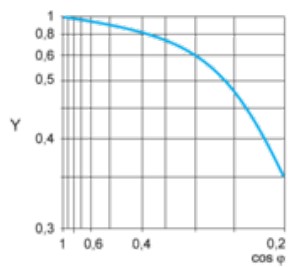
Resistive AC load



X Switching capacity (kVA)

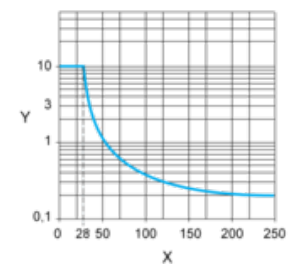
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor $\cos \phi$)



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.