

Product data sheet

Characteristics

RUMC32ND

Harmony Electromechanical Relays, Plug in relay, Zelio Relay, universal RUM, 3 C/O, 60 V DC, 10 A, with LED



Main

| | |
|--|----------------------|
| Range of product | Harmony Relay |
| 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 | 60 V DC |
| [Ithe] conventional enclosed thermal current | 10 A at -40...55 °C |
| Status LED | With |
| Control type | Lockable test button |
| Utilisation coefficient | 20 % |

Complementary

| | |
|--|--|
| Shape of pin | Cylindrical |
| [Ui] rated insulation voltage | 250 V conforming to IEC 300 V conforming to CSA 300 V conforming to 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 conforming to IEC |
| Resistive rated load | 10 A at 250 V AC 10 A at 28 V DC |
| Maximum switching capacity | 2500 VA/280 W |
| Minimum switching capacity | 170 mW at 10 mA, 17 V |
| Operating rate | <= 18000 cycles/hour no-load <= 1200 cycles/hour under load |
| Mechanical durability | 5000000 cycles |
| Electrical durability | 100000 cycles for resistive load |
| 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 | 2790 Ohm at 20 °C +/- 15 % |
| Rated operational voltage limits | 48...66 V DC |
| Protection category | RT I |

| | |
|-------------------------|------------------------|
| Test levels | Level A group mounting |
| Safety reliability data | B10d = 100000 |
| Operating position | Any position |
| Net weight | 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 | UL[RETURN]EAC[RETURN]CSA |
| Standards | CSA C22.2 No 14 EN/IEC 61810-1 UL 508 |
| Ambient air temperature for storage | -40...85 °C |
| Ambient air temperature for operation | -40...55 °C |
| Vibration resistance | 3 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles in operation 4 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles not operating |
| IP degree of protection | IP40 |
| Shock resistance | 10 gn (duration = 11 ms) for in operation conforming to EN/IEC 60068-2-27 10 gn (duration = 11 ms) for not operating conforming to EN/IEC 60068-2-27 |
| Pollution degree | 2 |

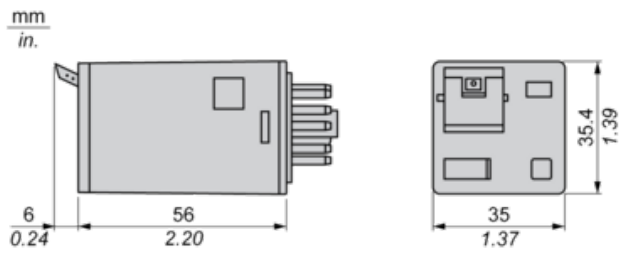
Packing Units

| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 6.9 cm |
| Package 1 Width | 3.55 cm |
| Package 1 Length | 3.5 cm |
| Package 1 Weight | 93 g |

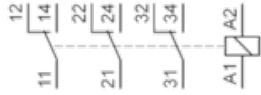
Offer Sustainability

| | |
|----------------------------|--|
| Sustainable offer status | Green Premium product |
| 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 |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | No need of specific recycling operations |

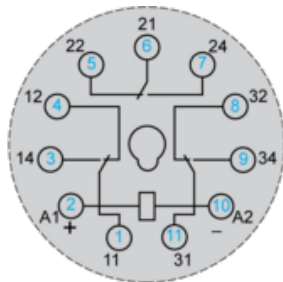
Dimensions



Wiring Diagram



Wiring Diagram

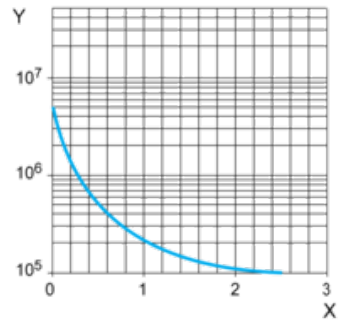


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

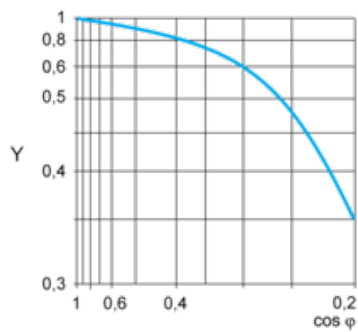
Resistive AC load



X Switching capacity (kVA)

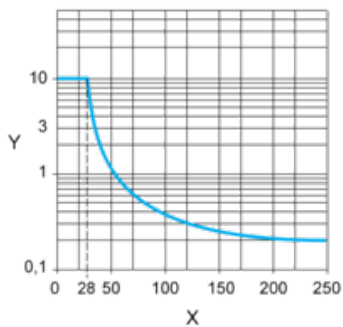
Y Durability (Number of operating cycles)

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.