RUMC32ED

Harmony, Universal plug-in relay, 10 A, 3 CO, with LED, with lockable test button, 48 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 | 48 V DC |
| [Ithe] conventional enclosed thermal current | 10 A at -4055 °C |
| Status LED | With |
| Control type | Lockable test button |
| Utilisation coefficient | 20 % |

Complementary

| 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 |
| [le] 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 Uc DC |
| Operate time | 20 ms at nominal voltage |
| Release time | 20 ms at nominal voltage |
| Average coil resistance | 1800 Ohm at 20 °C +/- 15 % |
| Rated operational voltage limits | 38.452.8 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 | CSA |
| | EAC |
| | UL |
| Standards | CSA C22.2 No 14 |
| | UL 508 |
| | EN/IEC 61810-1 |
| Ambient air temperature for storage | -4085 °C |
| Ambient air temperature for operation | -4055 °C |
| Vibration resistance | 3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation |
| | 4 gn, amplitude = +/- 1 mm (f = 10150 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

| i acking critis | |
|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 92 g |
| Package 1 Height | 6.9 cm |
| Package 1 width | 3.55 cm |
| Package 1 Length | 3.5 cm |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 10 |
| Package 2 Weight | 1.42 kg |
| Package 2 Height | 4 cm |
| Package 2 width | 14.6 cm |
| Package 2 Length | 20 cm |
| Unit Type of Package 3 | S02 |
| Number of Units in Package 3 | 60 |
| Package 3 Weight | 6.461 kg |
| Package 3 Height | 15 cm |
| Package 3 width | 30 cm |
| Package 3 Length | 40 cm |
| | |

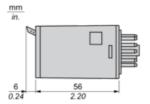
Offer Sustainability

| Green Premium product |
|--|
| REACh Declaration |
| Yes |
| Pro-active compliance (Product out of EU RoHS legal scope) EEU RoHS Declaration |
| Yes |
| Yes |
| €Yes |
| China RoHS Declaration |
| Product Environmental Profile |
| |

Product data sheet Dimensions Drawings

RUMC32ED

Dimensions





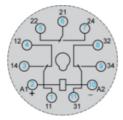
Product data sheet Connections and Schema

RUMC32ED

Wiring Diagram



Wiring Diagram



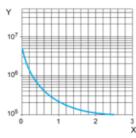
Symbols shown in blue correspond to Nema marking.

RUMC32ED

Electrical Durability of Contacts

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

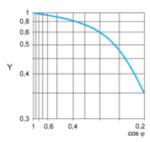
Resistive AC load



X Switching capacity (kVA)

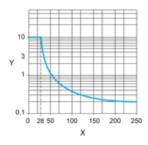
Y Durability (Number of operating cycles)

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.