# **Product datasheet** Characteristics

RUMC32E7 universal plug-in relay - Zelio RUM - 3 C/O - 48 V AC - 10 A - with LED



#### Main

| i vicani                                     |                      |  |
|--|----------------------|--|
| Range of product                             | Zelio Relay          |  |
| Series name                                  | Universal            |  |
| Product or component type                    | Plug-in relay        |  |
| Device short name                            | RUM                  |  |
| Contacts type and composition                | 3 C/O                |  |
| Control circuit voltage                      | 48 V AC              |  |
| [Ithe] conventional enclosed thermal current | 10 A at -4055 °C     |  |
| Status LED                                   | With                 |  |
| Control type                                 | Lockable test button |  |
| Utilisation coefficient                      | 20 %                 |  |

#### Complementary

| Main   |  |  |
|--|--|--|
| Range of product                             | Zelio Relay  |  |
| Series name                                  | Universal  |  |
| Product or component type                    | Plug-in relay  |  |
| Device short name                            | RUM  |  |
| Contacts type and composition                | 3 C/O  |  |
| Control circuit voltage                      | 48 V AC  |  |
| [Ithe] conventional enclosed thermal current | 10 A at -4055 °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<br>300 V conforming to UL<br>300 V conforming to CSA   |  |
| [Uimp] rated impulse withstand voltage       | 4 kV (1.2/50 μs)   |  |
| Contacts material                            | AgNi   |  |
| [le] rated operational current               | 10 A at 28 V DC (NO) conforming to IEC<br>10 A at 250 V AC (NO) conforming to IEC<br>5 A at 28 V DC (NC) conforming to IEC<br>5 A at 250 V AC (NC) conforming to IEC<br>10 A at 30 V DC conforming to UL<br>10 A at 277 V AC conforming to UL<br>10 A at 30 V DC conforming to CSA<br>10 A at 277 V AC (same polarity) conforming to CSA |  |
| Maximum switching voltage                    | 250 V conforming to IEC  |  |
| Load current                                 | 10 A at 250 V AC<br>10 A at 28 V DC  |  |
|  |  |  |



| Minimum switching capacity       | 170 mW at 10 mA, 17 V  |
|----------------------------------|--|
| Operating rate                   | <= 18000 cycles/hour no-load<br><= 1200 cycles/hour under load |
| Mechanical durability            | 5000000 cycles   |
| Electrical durability            | 100000 cycles for resistive load                               |
| Average consumption in VA        | 3 at 60 Hz   |
| Drop-out voltage threshold       | >= 0.15 Uc AC  |
| Operating time                   | 20 ms at nominal voltage                                       |
| Reset time                       | 20 ms at nominal voltage                                       |
| Average resistance               | 290 Ohm at 20 °C +/- 15 %                                      |
| Rated operational voltage limits | 38.452.8 V AC  |
| Protection category              | RT I   |
| Safety reliability data          | B10d = 100000  |
| Operating position               | Any position   |
| Product weight                   | 0.086 kg   |
|                                  |  |

## Environment

| Dielectric strength                   | 2000 V AC between poles with basic insulation                       |  |
|---------------------------------------|---|--|
| C C                                   | 1500 V AC between contacts with micro disconnection insulation      |  |
|                                       | 2500 V AC between coil and contact with reinforced insulation       |  |
| Product certifications                | CSA   |  |
|                                       | REACH   |  |
|                                       | RoHS  |  |
|                                       | EAC   |  |
|                                       | UL  |  |
| Standards                             | CSA C22.2 No 14   |  |
|                                       | EN/IEC 61810-1  |  |
|                                       | UL 508  |  |
| Ambient air temperature for storage   | -4085 °C  |  |
| Ambient air temperature for operation | -4055 °C  |  |
| Vibration resistance                  | 3 gn (f = 10150 Hz), amplitude +/- 1 mm (on 5 cycles in operation)  |  |
|                                       | 4 gn (f = 10150 Hz), amplitude +/- 1 mm (on 5 cycles not operating) |  |
| IP degree of protection               | IP40  |  |
| Pollution degree                      | 2   |  |
| Shock resistance                      | 10 gn for 11 ms in operation conforming to EN/IEC 60068-2-27        |  |
|                                       | 10 gn for 11 ms not operating conforming to EN/IEC 60068-2-27       |  |

# Offer Sustainability

| Sustainable offer status         | Green Premium product   |  |
|----------------------------------|---|--|
| RoHS (date code: YYWW)           | Compliant - since 1409 - Schneider Electric declaration of conformity |  |
|                                  | Schneider Electric declaration of conformity                          |  |
| REACh                            | Reference not containing SVHC above the threshold                     |  |
|                                  | Reference not containing SVHC above the threshold                     |  |
| Product environmental profile    | Available   |  |
|                                  | Product environmental   |  |
| Product end of life instructions | Need no specific recycling operations                                 |  |

RUMC32E7

Dimensions

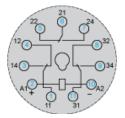
Wiring Diagram



Product datasheet **Connections and Schema** 

RUMC32E7

Wiring Diagram

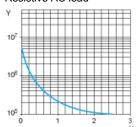


Symbols shown in blue correspond to Nema marking.

### **Electrical Durability of Contacts**

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

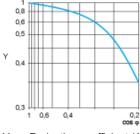
RUMC32E7



X Switching capacity (kVA)

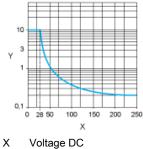
Y Durability (Number of operating cycles)

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



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



Y Current DC

Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.