



## 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                              |
| [Uc] control circuit voltage                 | 48 V AC                            |
| [Ithe] conventional enclosed thermal current | 10 A at -40...131 °F (-40...55 °C) |
| Status LED                                   | With                               |
| Control type                                 | Without lockable test button       |
| Utilisation coefficient                      | 20 %                               |

## Complementary

|  |  |
|--|--|
| Shape of pin                           | Flat   |
| [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   |
| [Ie] 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  |
| Maximum switching capacity             | 2500 VA/280 W  |
| 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 resistive load   |
| Average coil consumption in VA         | 3 at 60 Hz   |
| Drop-out voltage threshold             | >= 0.15 U <sub>c</sub> 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       | 38.4...52.8 V AC   |
| Protection category                    | RT I   |
| Safety reliability data                | B10d = 100000  |
| Operating position                     | Any position   |
| Product weight                         | 0.19 lb(US) (0.086 kg)   |
| Device presentation                    | Complete product   |

## Environment

|                     |   |
|---------------------|---|
| dielectric strength | 2000 V AC between poles with basic insulation |
|---------------------|---|

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

1500 V AC between contacts with micro disconnection insulation  
2500 V AC between coil and contact with reinforced insulation

|                                       |   |
|---------------------------------------|---|
| product certifications                | CSA<br>RoHS<br>UL<br>REACH<br>EAC   |
| standards                             | EN/IEC 61810-1<br>UL 508<br>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 (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles in operation)<br>4 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles not operating) |
| IP degree of protection               | IP40  |
| shock resistance                      | 10 gn 11 ms in operation conforming to EN/IEC 60068-2-27<br>10 gn 11 ms not operating conforming to EN/IEC 60068-2-27                           |
| pollution degree                      | 3   |

### Offer Sustainability

|  |  |
|--|--|
| Green Premium product  | Green Premium product  |
| Compliant - since 1430 - Schneider Electric declaration of conformity  | Compliant - since 1430 - Schneider Electric declaration of conformity  |
| Reference not containing SVHC above the threshold  | Reference not containing SVHC above the threshold  |
| Available  | Available  |
| Need no specific recycling operations  | Need no specific recycling operations  |
| WARNING: This product can expose you to chemicals including:   | WARNING: This product can expose you to chemicals including:   |
| Nickel compounds, which is known to the State of California to cause cancer, and   | 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. | 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 <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                              | For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                              |

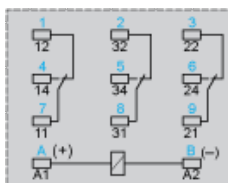
### Dimensions



### 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.