



## 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                 | 125 V DC                           |
| [Ithe] conventional enclosed thermal current | 10 A at -40...131 °F (-40...55 °C) |
| Status LED                                   | Without                            |
| 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   |
| [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               | 1.4 W  |
| Drop-out voltage threshold             | >= 0.1 Uc DC   |
| Operating time                         | 20 ms at nominal voltage   |
| Reset time                             | 20 ms at nominal voltage   |
| Average resistance                     | 7300 Ohm at 20 °C +/- 15 %   |
| Rated operational voltage limits       | 100...137.5 V DC   |
| 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

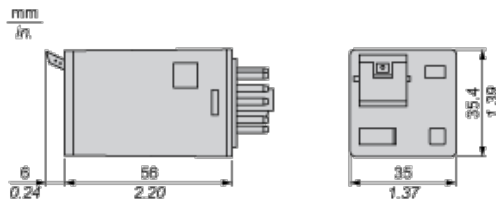
|                     |   |
|---------------------|---|
| dielectric strength | 2000 V AC between poles with basic insulation |
|---------------------|---|

|                                       |   |
|---------------------------------------|---|
|                                       | 1500 V AC between contacts with micro disconnection insulation<br>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                      | 2   |

### 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>                              |

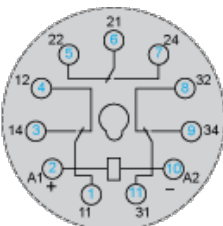
### Dimensions



### Wiring Diagram



### Wiring Diagram

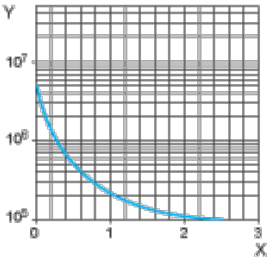


Symbols shown in blue correspond to Nema marking.

## Electrical Durability of Contacts

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

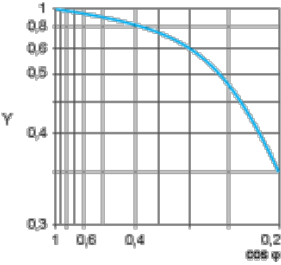
Resistive AC load



X Switching capacity (kVA)

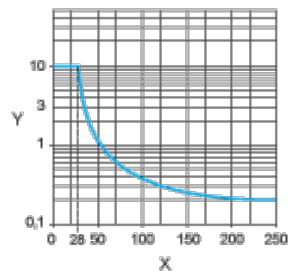
Y Durability (Number of operating cycles)

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.