



## 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                           | 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 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       | 38.4...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 |
|---------------------|-----------------------------------------------|

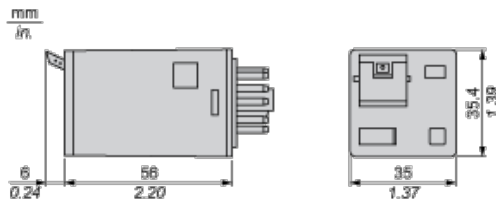
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|                                       |                                                                                                                                                 |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | 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>                              |

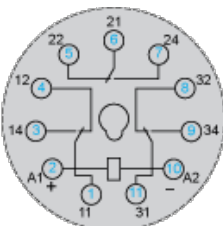
### Dimensions



### Wiring Diagram



### Wiring Diagram

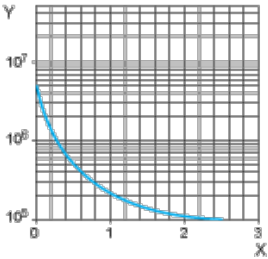


Symbols shown in blue correspond to Nema marking.

## Electrical Durability of Contacts

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

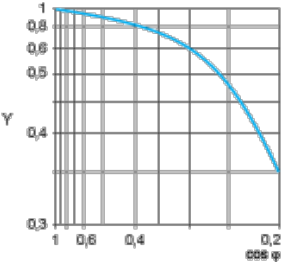
Resistive AC load



X Switching capacity (kVA)

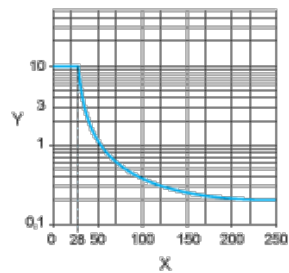
Y Durability (Number of operating cycles)

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.