



Price\* : 8.18 GBP



## Main

|                                              |                      |
|----------------------------------------------|----------------------|
| Range of product                             | Zelio Relay          |
| Series name                                  | Universal            |
| Product or component type                    | Plug-in relay        |
| Device short name                            | RUM                  |
| Contacts type and composition                | 2 C/O                |
| [Uc] control circuit voltage                 | 12 V DC              |
| [Ithe] conventional enclosed thermal current | 10 A at -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 CSA<br>300 V conforming to UL                                                                                                                                                                                                                                             |
| [Uimp] rated impulse withstand voltage | 4 kV (1.2/50 µs)                                                                                                                                                                                                                                                                                                         |
| Contacts material                      | AgNi                                                                                                                                                                                                                                                                                                                     |
| [Ie] rated operational current         | 10 A at 277 V AC conforming to UL<br>10 A at 30 V DC conforming to UL<br>10 A at 30 V DC conforming to CSA<br>5 A at 250 V AC (NC) conforming to IEC<br>5 A at 28 V DC (NC) conforming to IEC<br>10 A at 250 V AC (NO) conforming to IEC<br>10 A at 28 V DC (NO) conforming to IEC<br>10 A at 277 V AC conforming to CSA |
| Maximum switching voltage              | 250 V conforming to IEC                                                                                                                                                                                                                                                                                                  |
| Resistive rated load                   | 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 for resistive load                               |
| Average coil consumption in W    | 1.4 W                                                          |
| Drop-out voltage threshold       | >= 0.1 U <sub>c</sub> DC                                       |
| Operate time                     | 20 ms at nominal voltage                                       |
| Release time                     | 20 ms at nominal voltage                                       |
| Average coil resistance          | 120 Ohm at 20 °C +/- 15 %                                      |
| Rated operational voltage limits | 9.6...13.2 V DC                                                |
| Protection category              | RT I                                                           |
| Test levels                      | Level A group mounting                                         |
| Safety reliability data          | B10d = 100000                                                  |
| Operating position               | Any position                                                   |
| Product weight                   | 0.086 kg                                                       |
| Device presentation              | Complete product                                               |

## Environment

|                                       |                                                                                                                                                         |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dielectric strength                   | 1500 V AC between contacts with micro disconnection<br>2500 V AC between coil and contact with reinforced<br>2000 V AC between poles with basic         |
| Product certifications                | REACH<br>UL<br>CSA<br>RoHS<br>EAC                                                                                                                       |
| Standards                             | UL 508<br>CSA C22.2 No 14<br>EN/IEC 61810-1                                                                                                             |
| Ambient air temperature for storage   | -40...85 °C                                                                                                                                             |
| Ambient air temperature for operation | -40...55 °C                                                                                                                                             |
| Vibration resistance                  | 3 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles in operation<br>4 gn, amplitude = +/- 1 mm (f = 10...150 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<br>10 gn (duration = 11 ms) for not operating conforming to EN/IEC 60068-2-27 |
| Pollution degree                      | 3                                                                                                                                                       |

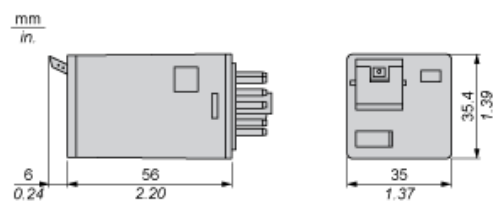
## Offer Sustainability

|                            |                                                                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                             |
| REACH free of SVHC         | Yes                                                                                               |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes                                                                                               |
| Mercury free               | Yes                                                                                               |
| RoHS exemption information | <a href="#">Yes</a>                                                                               |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>                                                            |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                     |
| Circularity Profile        | No need of specific recycling operations                                                          |

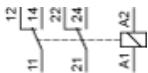
## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

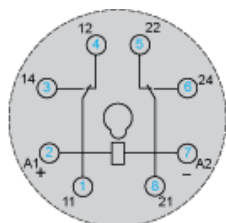
## Dimensions



Wiring Diagram



## Wiring Diagram

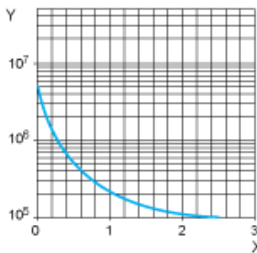


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

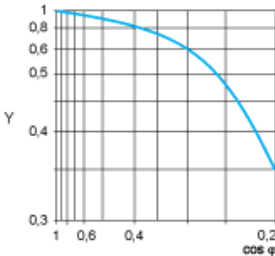
Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



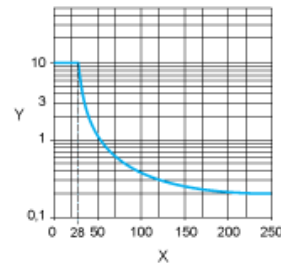
X Switching capacity (kVA)  
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor cos φ)



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.