



## Main

|                                              |                      |
|----------------------------------------------|----------------------|
| Range of product                             | Zelio Relay          |
| Series name                                  | Power                |
| Product or component type                    | Plug-in relay        |
| Device short name                            | RPM                  |
| Contacts type and composition                | 4 C/O                |
| Control circuit voltage                      | 48 V DC              |
| [Ithe] conventional enclosed thermal current | 15 A at -40...55 °C  |
| Status LED                                   | Without              |
| Control type                                 | Lockable test button |
| Utilisation coefficient                      | 20 %                 |

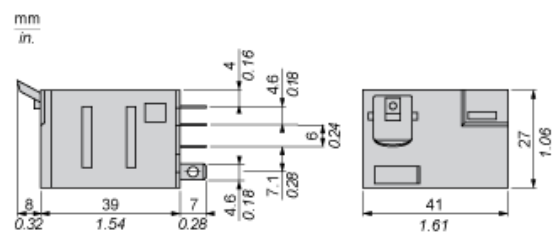
## Complementary

|                                        |                                                                                                                                                                                                                                                   |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape of pin                           | Flat                                                                                                                                                                                                                                              |
| [Ui] rated insulation voltage          | 300 V conforming to UL<br>300 V conforming to CSA<br>250 V conforming to IEC                                                                                                                                                                      |
| [Uimp] rated impulse withstand voltage | 4 kV for 1.2/50 µs                                                                                                                                                                                                                                |
| Contacts material                      | AgNi                                                                                                                                                                                                                                              |
| [Ie] rated operational current         | 7.5 A at 28 V DC (NC) conforming to IEC<br>7.5 A at 250 V AC (NC) conforming to IEC<br>15 A at 28 V DC (NO) conforming to IEC<br>15 A at 250 V AC (NO) conforming to IEC<br>15 A at 28 V DC conforming to UL<br>15 A at 277 V AC conforming to UL |
| Maximum switching voltage              | 250 V conforming to IEC                                                                                                                                                                                                                           |
| Resistive load current                 | 15 A at 28 V DC<br>15 A at 250 V AC                                                                                                                                                                                                               |
| Maximum switching capacity             | 420 W<br>3750 VA                                                                                                                                                                                                                                  |
| 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                  | 10000000 cycles                                                                                                                                                                                                                                   |
| Electrical durability                  | 100000 cycles for resistive load                                                                                                                                                                                                                  |
| Average coil consumption               | 1.6 W                                                                                                                                                                                                                                             |
| Drop-out voltage threshold             | >= 0.1 Uc DC                                                                                                                                                                                                                                      |
| Operate time                           | 20 ms at nominal voltage                                                                                                                                                                                                                          |
| Release time                           | 20 ms at nominal voltage                                                                                                                                                                                                                          |
| Rated operational voltage limits       | 38.4...52.8 V DC                                                                                                                                                                                                                                  |
| Protection category                    | RT I                                                                                                                                                                                                                                              |
| Operating position                     | Any position                                                                                                                                                                                                                                      |
| Safety reliability data                | B10d = 100000                                                                                                                                                                                                                                     |
| Product weight                         | 0.071 kg                                                                                                                                                                                                                                          |

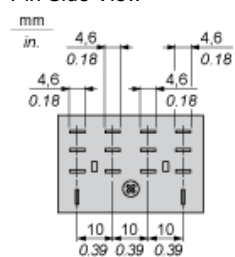
## Environment

|                                       |                                                                                                                                                                                  |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dielectric strength                   | 2000 V AC between poles with basic insulation<br>2000 V AC between coil and contact with reinforced insulation<br>1500 V AC between contacts with micro disconnection insulation |
| Standards                             | EN/IEC 61810-1<br>UL 508<br>CSA C22.2 No 14                                                                                                                                      |
| Product certifications                | CSA<br>RoHS<br>UL<br>REACH<br>EAC                                                                                                                                                |
| Ambient air temperature for storage   | -40...85 °C                                                                                                                                                                      |
| Ambient air temperature for operation | -40...55 °C                                                                                                                                                                      |
| Vibration resistance                  | 5 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles not operating)<br>3 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles in operation)                                  |
| Degree of protection (Housing only)   | IP40 conforming to EN/IEC 60529                                                                                                                                                  |
| Shock resistance                      | 30 gn not operating<br>15 gn in operation                                                                                                                                        |
| Pollution degree                      | 3                                                                                                                                                                                |

## Dimensions



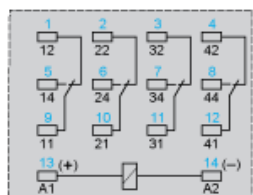
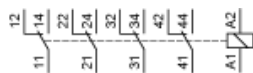
Pin Side View



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## Wiring Diagram

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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.