



### Main

|                                              |                     |
|----------------------------------------------|---------------------|
| Range of product                             | Zelio Relay         |
| Series name                                  | Interface relay     |
| Product or component type                    | Plug-in relay       |
| Device short name                            | RSB                 |
| Contacts type and composition                | 1 C/O               |
| Contacts operation                           | Standard            |
| Control circuit voltage                      | 12 V DC             |
| [Ithe] conventional enclosed thermal current | 16 A at -40...40 °C |
| Status LED                                   | Without             |
| Control type                                 | Without push-button |
| Sale per indivisible quantity                | 10                  |

### Complementary

|                                        |                                                                                 |
|----------------------------------------|---------------------------------------------------------------------------------|
| Shape of pin                           | Flat (PCB type)                                                                 |
| Average coil resistance                | 360 Ohm (AC) at 20 °C +/- 10 %                                                  |
| [Ue] rated operational voltage         | 8.4...18 V DC                                                                   |
| [Ui] rated insulation voltage          | 400 V conforming to EN/IEC 60947                                                |
| [Uimp] rated impulse withstand voltage | 3.6 kV conforming to IEC 61000-4-5                                              |
| Contacts material                      | Silver alloy (AgNi)                                                             |
| [Ie] rated operational current         | 8 A, NC (AC-1/DC-1) conforming to IEC<br>16 A, NO (AC-1/DC-1) conforming to IEC |
| Minimum switching current              | 100 mA                                                                          |
| Maximum switching voltage              | 250 V DC conforming to IEC                                                      |
| Minimum switching voltage              | 5 V                                                                             |
| Maximum switching capacity             | 4000 VA/448 W                                                                   |
| Resistive rated load                   | 16 A at 28 V DC<br>16 A at 250 V AC                                             |
| Minimum switching capacity             | 500 mW at 100 mA / 5 V                                                          |
| Operating rate                         | <= 18000 cycles/hour no-load<br><= 600 cycles/hour under load                   |
| Mechanical durability                  | 30000000 cycles                                                                 |
| Electrical durability                  | 100000 cycles (8 A at 250 V, AC-1) NC<br>100000 cycles (16 A at 250 V, AC-1) NO |
| Operating time                         | 10 ms reset<br>20 ms operating                                                  |
| Average coil consumption               | 0.45 W DC                                                                       |
| Drop-out voltage threshold             | >= 0.1 Uc DC                                                                    |
| Safety reliability data                | B10d = 100000                                                                   |
| Protection category                    | RT I                                                                            |
| Operating position                     | Any position                                                                    |
| Product weight                         | 0.014 kg                                                                        |

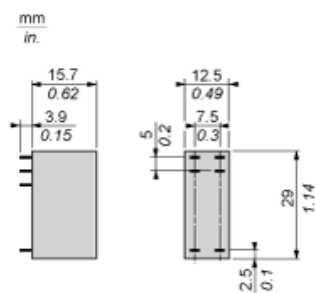
## Environment

|                                       |                                                                                                                              |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Dielectric strength                   | 5000 V AC between coil and contact<br>2500 V AC between poles<br>1000 V AC between contacts                                  |
| Standards                             | EN/IEC 61810-1<br>UL 508<br>CSA C22.2 No 14                                                                                  |
| Product certifications                | CSA<br>UL<br>EAC                                                                                                             |
| Ambient air temperature for storage   | -40...85 °C                                                                                                                  |
| Vibration resistance                  | +/- 1 mm (f = 10...55 Hz) conforming to EN/IEC 60068-2-6                                                                     |
| IP degree of protection               | IP40 conforming to EN/IEC 60529                                                                                              |
| Shock resistance                      | 5 gn for 11 ms in operation conforming to EN/IEC 60068-2-27<br>10 gn for 11 ms not operating conforming to EN/IEC 60068-2-27 |
| Ambient air temperature for operation | -40...85 °C (DC)                                                                                                             |

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Dimensions

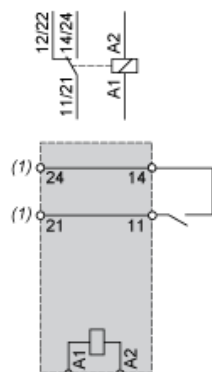
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Wiring Diagram

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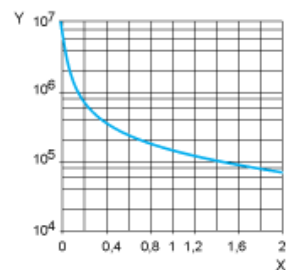


(1) Before wiring please refer to the Instruction sheet

## Electrical Durability of Contacts

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

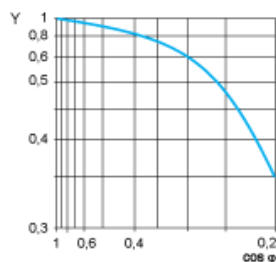
Resistive AC load



X Switching capacity (kVA)

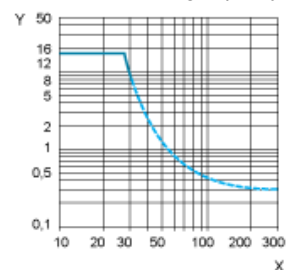
Y Durability (Number of operating cycles)

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.