

### 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                | 2 C/O               |
| Control circuit voltage                      | 110 V DC            |
| [Ithe] conventional enclosed thermal current | 8 A at $\leq 40$ °C |
| Status LED                                   | Without             |
| Control type                                 | Without pushbutton  |
| Sale per indivisible quantity                | 10                  |

### Complementary

|  |  |
|--|--|
| Shape of pin                           | Flat (PCB type)  |
| Average resistance                     | 25200 Ohm (DC) at 20 °C +/- 10 %   |
| Rated operational voltage limits       | 88...121 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 (Ag/Ni)   |
| [Ie] rated operational current         | 4 A, NC (AC-1/DC-1) conforming to IEC<br>8 A, NO (AC-1/DC-1) conforming to IEC   |
| Minimum switching current              | 5 mA   |
| Maximum switching voltage              | 300 V DC<br>400 V AC   |
| Minimum switching voltage              | 5 V  |
| Maximum switching capacity             | 2000 VA (AC)<br>224 W (DC)   |
| Minimum switching capacity             | 300 mW   |
| Operating rate                         | $\leq 10$ cyc/mn (under load)<br>$\leq 1200$ cyc/mn (no-load)  |
| Mechanical durability                  | 30000000 cycles  |
| Electrical durability                  | $\geq 100000$ cycles for resistive load at 8 A, 250 V  |
| Operating time                         | 10 ms between coil de-energisation and making of the Off-delay contact (AC)<br>12 ms between coil energisation and making of the On-delay contact (AC)<br>4 ms between coil de-energisation and making of the Off-delay contact (DC)<br>9 ms between coil energisation and making of the On-delay contact (DC) |
| Marking                                | CE   |
| Protection category                    | RT I   |
| Operating position                     | Any position   |
| CAD overall width                      | 13 mm  |
| CAD overall height                     | 29 mm  |
| CAD overall depth                      | 20 mm  |
| Terminals description ISO n°1          | (11-14-23)OC<br>(21-22-24)OC<br>(A1-A2)CO  |
| Product weight                         | 0.014 kg   |
| Resistive rated load                   | 8 A at 250 V AC<br>8 A at 28 V DC  |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

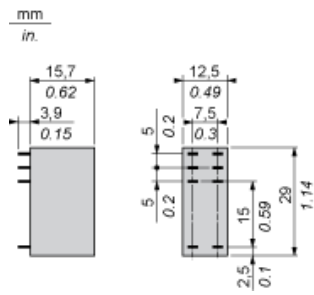
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|----------------------------|---|
| Average consumption        | AC : 0.75 VA<br>DC : 0.45 W                 |
| Drop-out voltage threshold | AC : $\geq 0.15 U_c$<br>DC : $\geq 0.1 U_c$ |

## Environment

|                                       |   |
|---------------------------------------|---|
| Dielectric strength                   | 1000 V AC between contacts<br>2500 V AC between poles<br>5000 V AC between coil and contact             |
| Standards                             | CSA C22-2 No 14<br>EN/IEC 61810-1<br>UL 508   |
| Product certifications                | CSA<br>UL   |
| Ambient air temperature for storage   | -40...85 °C   |
| Vibration resistance                  | 10 gn (f = 10...150 Hz) conforming to EN/IEC 60068-2-6  |
| IP degree of protection               | IP40 conforming to EN/IEC 60529   |
| Shock resistance                      | 10 gn (on closing) conforming to EN/IEC 60068-2-27<br>5 gn (on opening) conforming to EN/IEC 60068-2-27 |
| Ambient air temperature for operation | -40...85 °C (DC)  |
| RoHS EUR status                       | Compliant   |
| RoHS EUR conformity date              | 0401  |

Interface Relay

Dimensions

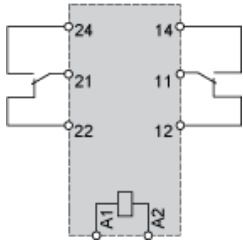
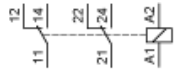


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Interface Relay

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Wiring Diagram

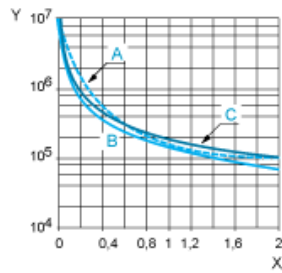


RSB Interface Relays

Electrical Durability of Contacts

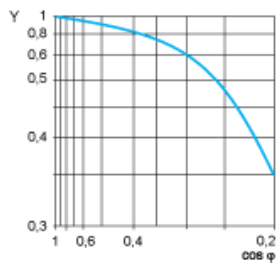
Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



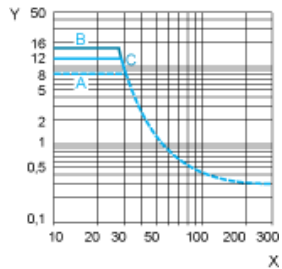
- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)
- A RSB2A080
- B RSB1A160
- C RSB1A120

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
- A RSB2A080
- B RSB1A160
- C RSB1A120