## Product datasheet Characteristics

## **RSB1A120B7S**

interface plug-in relay - Zelio RSB - 1 C/O - 24 V AC - 12 A - with socket



#### Main

| IVIAIII                                      |                     |
|--|---------------------|
| 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                      | 24 V AC             |
| [Ithe] conventional enclosed thermal current | 12 A at -4040 °C    |
| Status LED                                   | Without             |
| Control type                                 | Without push-button |
| Sale per indivisible quantity                | 10                  |
|  |                     |

#### Complementary

| o o mpio mornary                       |   |   |
|--|---|---|
| Shape of pin                           | Flat  | .9<br>-   |
| Average resistance                     | 400 Ohm (AC) at 20 °C +/- 15 %  | 5   |
| [Ue] rated operational voltage         | 19.226.4 V, 50 Hz AC<br>20.426.4 V, 60 Hz AC                                    | 9<br>11<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10 |
| [Ui] rated insulation voltage          | 400 V conforming to EN/IEC 60947  | ā   |
| [Uimp] rated impulse withstand voltage | 3.6 kV conforming to IEC 61000-4-5  | ,<br>T  |
| Contacts material                      | Silver alloy (Ag/Ni)  |   |
| [le] rated operational current         | 12 A, NO (AC-1/DC-1) conforming to IEC<br>6 A, NC (AC-1/DC-1) conforming to IEC |   |
| Minimum switching current              | 5 mA  |   |
| Maximum switching voltage              | 300 V DC<br>400 V AC  |   |
| Switching voltage                      | 5 V   | Ë   |
| Maximum switching capacity             | 3000 VA (AC)<br>336 W (DC)  | E.<br>C.  |

| Load current               | 12 A at 250 V AC<br>12 A at 28 V DC   |  |
|----------------------------|---|--|
| Minimum switching capacity | 300 mW at 5 mA  |  |
| Operating rate             | <= 600 cycles/hour under load<br><= 72000 cycles/hour no-load   |  |
| Mechanical durability      | 30000000 cycles   |  |
| Electrical durability      | 100000 cycles (12 A at 250 V, AC-1) NO<br>100000 cycles (6 A at 250 V, AC-1) NC   |  |
| Operating time             | 10 ms between coil de-energisation and making of the Off-delay contact 12 ms between coil energisation and making of the On-delay contact |  |
| Marking                    | CE  |  |
| Average consumption in W   | 0.75 VA AC at 60 Hz   |  |
| Drop-out voltage threshold | >= 0.15 Uc AC   |  |
| Safety reliability data    | B10d = 100000   |  |
| Protection category        | RT I  |  |
| Operating position         | Any position  |  |

#### Environment

| Dielectric strength                   | 1000 V AC between contacts                                   |
|---------------------------------------|--|
|                                       | 2500 V AC between poles                                      |
|                                       | 5000 V AC between coil and contact                           |
| Standards                             | CSA C22.2 No 14  |
|                                       | UL 508   |
|                                       | EN/IEC 61810-1   |
| Product certifications                | GOST   |
|                                       | UL   |
|                                       | CSA  |
| Ambient air temperature for storage   | -4085 °C   |
| Vibration resistance                  | +/- 1 mm (f = 1055 Hz) conforming to EN/IEC 60068-2-6        |
| IP degree of protection               | IP40 conforming to EN/IEC 60529                              |
| Shock resistance                      | 10 gn for11 ms not operating conforming to EN/IEC 60068-2-27 |
|                                       | 5 gn for11 ms in operation conforming to EN/IEC 60068-2-27   |
| Ambient air temperature for operation | -4070 °C (AC)  |
|                                       | -4085 °C (DC)  |
|                                       |  |

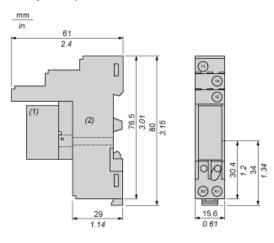
#### Contractual warranty

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

## **RSB1A120B7S**

#### **Dimensions**

#### Relay Complete with Socket



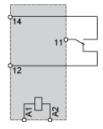
- Relays
- (1) (2) Socket

# Product datasheet Connections and Schema

## **RSB1A120B7S**

### Wiring Diagram



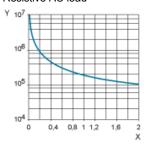


### **RSB1A120B7S**

#### **Electrical Durability of Contacts**

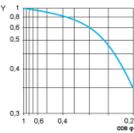
Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



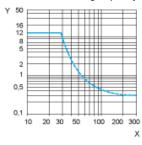
- Switching capacity (kVA)
- X Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor  $\cos \phi$ )



#### Reduction coefficient (A) Υ

Maximum switching capacity on resistive DC load



- Χ Voltage DC
- Current DC

Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.