# **RSB1A160M7**



#### 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                        |
| Contact operation                            | Standard                     |
| [Uc] control circuit voltage                 | 220 V AC                     |
| [Ithe] conventional enclosed thermal current | 16 A at -40104 °F (-4040 °C) |
| Status LED                                   | Without                      |
| Control type                                 | Without push-button          |
| Sale per indivisible quantity                | 10                           |

#### Complementary

| Complementary                          |   |  |
|--|---|--|
| Shape of pin                           | Flat (PCB type)   |  |
| Average resistance                     | 33000 Ohm (AC) at 20 °C +/- 10 %  |  |
| System Voltage                         | 176330 V, 50/60 Hz AC   |  |
| [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)   |  |
| [le] rated operational current         | 16 A, NO (AC-1/DC-1) conforming to IEC<br>8 A, NC (AC-1/DC-1) conforming to IEC |  |
| Minimum switching current              | 100 mA  |  |
| Maximum switching voltage              | 250 V DC conforming to IEC  |  |
| Switching voltage                      | 5 V   |  |
| Maximum switching capacity             | 4000 VA/448 W   |  |
| Load current                           | 16 A at 250 V AC<br>16 A at 28 V DC   |  |
| Minimum switching capacity             | 500 mW at 100 mA / 5 V  |  |
| Operating rate                         | <= 600 cycles/hour under load<br><= 18000 cycles/hour no-load                   |  |
| Mechanical durability                  | 10000000 cycles   |  |
| Electrical durability                  | 100000 cycles (16 A at 250 V, AC-1) NO<br>100000 cycles (8 A at 250 V, AC-1) NC |  |
| Operating time                         | 20 ms operating<br>20 ms reset  |  |
| Average coil consumption               | 0.75 VA AC  |  |
| Drop-out voltage threshold             | >= 0.15 Uc AC   |  |
| Safety reliability data                | B10d = 100000   |  |
| Protection category                    | RTI   |  |
| Operating position                     | Any position  |  |
| Product weight                         | 0.03 lb(US) (0.014 kg)  |  |
| Device presentation                    | Complete product  |  |

#### **Environment**

| dielectric strength | 1000 V AC between contacts<br>2500 V AC between poles<br>5000 V AC between coil and contact |
|---------------------|---|
| 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   | -40185 °F (-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 | -40158 °F (-4070 °C) (AC)   |  |

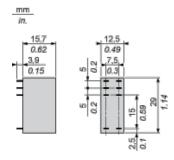
#### Offer Sustainability

| <u> </u>   |  |  |
|--|--|--|
| WARNING: This product can expose you to chemicals including:   | WARNING: This product can expose you to chemicals including:                     |  |
| Nickel compounds, which is known to the State of California to cause cancer, and   | Nickel compounds, which is known to the State of California to cause cancer, and |  |
| Di-isodecyl phthalate (DIDP), which is known to the StateDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth of California to cause birth defects or other reproductive defects or other reproductive harm. |  |  |
| For more information go to www.p65warnings.ca.gov  | For more information go to www.p65warnings.ca.gov                                |  |
|  |  |  |

#### Contractual warranty

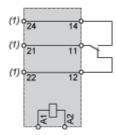
| Warranty period | 18 months |  |
|-----------------|-----------|--|
|-----------------|-----------|--|

#### **Dimensions**



## **Wiring Diagram**





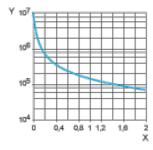
(1) Before wiring please refer to the Instruction sheet

### **Electrical Durability of Contacts**

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

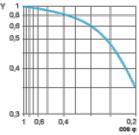
Resistive AC load





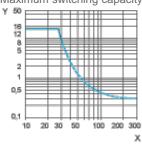
- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)

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.