# Product datasheet Characteristics

# RSB1A160B7S



#### 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	24 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

Shape of pin	Flat
Average resistance	400 Ohm (AC)at 20 °C +/- 15 %
System Voltage	19.226.4 V, 50 Hz AC 20.426.4 V, 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 (Ag/Ni)
[le] rated operational current	16 A, NO (AC-1/DC-1) conforming to IEC 8 A, NC (AC-1/DC-1) conforming to IEC
Minimum switching current	5 mA
Maximum switching voltage	300 V DC 400 V AC
Switching voltage	5 V
Maximum switching capacity	4000 VA (AC) 448 W (DC)
Load current	16 A at 250 V AC 16 A at 28 V DC
Minimum switching capacity	300 mWat 5 mA
Operating rate	<= 600 cycles/hour under load <= 72000 cycles/hour no-load
Mechanical durability	3000000 cycles
Electrical durability	100000 cycles (16 A at 250 V, AC-1) NO 100000 cycles (8 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 coil consumption	0.75 VA ACat 60 Hz
Drop-out voltage threshold	>= 0.15 Uc AC
Safety reliability data	B10d = 100000
Protection category	RTI
Operating position	Any position
Device presentation	Complete product

#### Environment dielectric strength

1000 V AC between contacts
2500 V AC between poles
5000 V AC between coil and contact



standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14	
product certifications	CSA GOST UL	
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) -40185 °F (-4085 °C) (DC)	

### **Offer Sustainability**

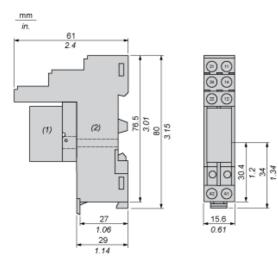
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Nickel compounds, which is known to the State of California to cause cancer, and	Nickel compounds, which is known to the State of California to cause cancer, and
Di-isodecyl phthalate (DIDP), which is known to the Sta of California to cause birth defects or other reproductive harm.	teDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth e 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

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#### **Dimensions**

#### Relay Complete with Socket



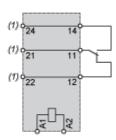
(1) Relays

(2) Socket

## Wiring Diagram





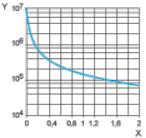


(1) Before wiring please refer to the Instruction sheet

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

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

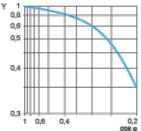
Resistive AC load



X Switching capacity (kVA)

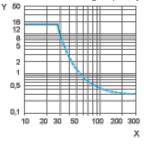
Y Durability (Number of operating cycles)

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.

