# Product datasheet Characteristics

## RSB1A160BD

interface plug-in relay - Zelio RSB - 1 C/O - 24 V DC - 16 A



#### 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 DC
[Ithe] conventional enclosed thermal current	16 A at -4040 °C
Status LED	Without
Control type	Without push-button
Sale per indivisible quantity	10

### Complementary

1		
Shape of pin	Flat (PCB type)	u
Average resistance	1440 Ohm (AC) at 20 °C +/- 10 %	or an
[Ue] rated operational voltage	16.836 V DC	Title f
[Ui] rated insulation voltage	400 V conforming to EN/IEC 60947	substi
[Uimp] rated impulse withstand voltage	3.6 kV conforming to IEC 61000-4-5	_ 6
Contacts material	Silver alloy (AgNi)	     Jded
[le] rated operational current	16 A, NO (AC-1/DC-1) conforming to IEC 8 A, NC (AC-1/DC-1) conforming to IEC	not inter
Minimum switching current	100 mA	— <u>si</u>
Maximum switching voltage	250 V DC conforming to IEC	entat
Switching voltage	5 V	— u
Maximum switching capacity	4000 VA/448 W	hisd
Load current	16 A at 250 V AC 16 A at 28 V DC	laimer: T

Minimum switching capacity	500 mW at 100 mA / 5 V
Operating rate	<= 600 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical durability	30000000 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	20 ms operating 10 ms reset
Marking	CE
Average consumption in W	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	1000 V AC between contacts 2500 V AC between poles 5000 V AC between coil and contact
Standards	CSA C22.2 No 14 EN/IEC 61810-1 UL 508
Product certifications	UL EAC 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	-4085 °C (DC)

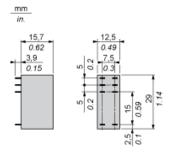
#### Contractual warranty

Warranty period	18 months

# Product datasheet Dimensions Drawings

# RSB1A160BD

#### **Dimensions**

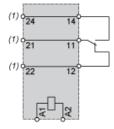


# Product datasheet Connections and Schema

## RSB1A160BD

### Wiring Diagram





(1) Before wiring please refer to the Instruction sheet

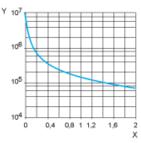
## **Product datasheet** Performance Curves

## RSB1A160BD

### **Electrical Durability of Contacts**

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

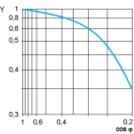
Resistive AC load



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

Voltage DC Χ

Current DC

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