

## Product datasheet

### Characteristics

# RSB1A160BD

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



### 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 DC
[Ithe] conventional enclosed thermal current	16 A at -40...40 °C
Status LED	Without
Control type	Without push-button
Sale per indivisible quantity	10

### Complementary

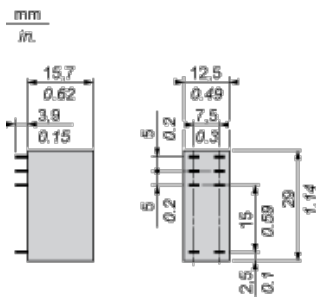
Shape of pin	Flat (PCB type)
Average resistance	1440 Ohm (AC) at 20 °C +/- 10 %
[Ue] rated operational voltage	16.8...36 V DC
[Ui] rated insulation voltage	400 V conforming to EN/IEC 60947
[Uimp] rated impulse withstand voltage	3.6 kV conforming to IEC 61000-4-5
Contacts material	Silver alloy (AgNi)
[Ie] 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	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 16 A at 28 V DC
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 20 ms reset
Marking	CE
Average coil consumption	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
Device presentation	Complete product

### Environment

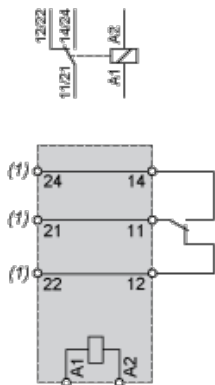
The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. 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.

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 UL EAC
ambient air temperature for storage	-40...85 °C
vibration resistance	+/- 1 mm (f = 10...55 Hz) conforming to EN/IEC 60068-2-6
IP degree of protection	IP40 conforming to EN/IEC 60529
shock resistance	10 gn for 11 ms not operating conforming to EN/IEC 60068-2-27 5 gn for 11 ms in operation conforming to EN/IEC 60068-2-27
ambient air temperature for operation	-40...85 °C (DC)

## Dimensions



## Wiring Diagram

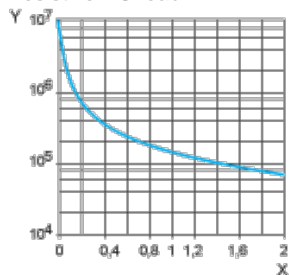


(1) Before wiring please refer to the Instruction sheet

## Electrical Durability of Contacts

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

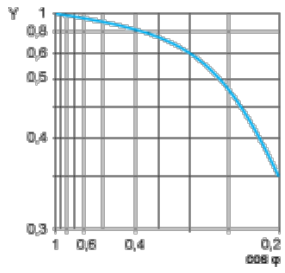
Resistive AC load



X Switching capacity (kVA)

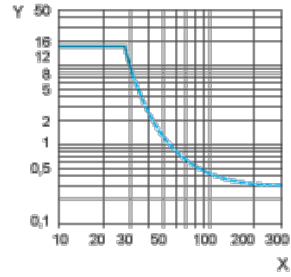
Y Durability (Number of operating cycles)

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.