## Product data sheet Characteristics

# RSB1A120BDS

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



#### 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
Contacts operation	Standard
Control circuit voltage	24 V DC
[Ithe] conventional enclosed thermal current	12 A at -4040 °C
Status LED	Without
Control type	Without push-button
Sale per indivisible quantity	10

Complementary

Complementary	
Shape of pin	Flat
Average coil resistance	1440 Ohm (DC) at 20 °C +/- 10 %
[Ue] rated operational voltage	19.226.4 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 (Ag/Ni)
[le] rated operational current	6 A, NC (AC-1/DC-1) conforming to IEC 12 A, NO (AC-1/DC-1) conforming to IEC
Minimum switching current	5 mA
Maximum switching voltage	400 V AC 300 V DC
Minimum switching voltage	5 V
Maximum switching capacity	336 W (DC) 3000 VA (AC)
Resistive rated load	12 A at 28 V DC 12 A at 250 V AC
Minimum switching capacity	300 mW at 5 mA
Operating rate	<= 72000 cycles/hour no-load <= 600 cycles/hour under load
Mechanical durability	30000000 cycles
Electrical durability	100000 cycles (6 A at 250 V, AC-1) NC 100000 cycles (12 A at 250 V, AC-1) NO
Operating time	9 ms between coil energisation and making of the On-delay contact 4 ms between coil de-energisation and making of the Off-delay contact
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

### Environment

Dielectric strength	5000 V AC between coil and contact
	2500 V AC between poles
	1000 V AC between contacts
Standards	EN/IEC 61810-1
	UL 508
	CSA C22.2 No 14
Product certifications	CSA
	GOST
	UL
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	5 gn for11 ms in operation conforming to EN/IEC 60068-2-27
	10 gn for11 ms not operating conforming to EN/IEC 60068-2-27
Ambient air temperature for operation	-4085 °C (DC)
	-4070 °C (AC)

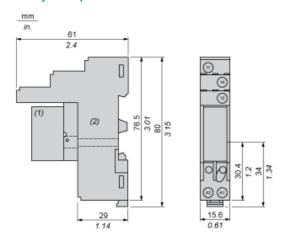


# Product data sheet **Dimensions Drawings**

# RSB1A120BDS

### **Dimensions**

## Relay Complete with Socket



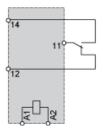
- (1) Relays (2) Socket

# Product data sheet Connections and Schema

# RSB1A120BDS

## Wiring Diagram



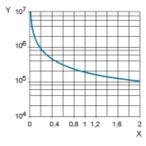


## RSB1A120BDS

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

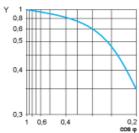
Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



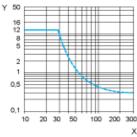
- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)

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



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.