

## RSB1A120JD

interface plug-in relay - Zelio RSB - 1 C/O - 12 V DC  
- 12 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	12 V DC
[Ithe] conventional enclosed thermal current	12 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	360 Ohm (AC) at 20 °C +/- 10 %
[Ue] rated operational voltage	8.4...18 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	12 A, NO (AC-1/DC-1) conforming to IEC 6 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	3000 VA/336 W
Load current	12 A at 250 V AC 12 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 (12 A at 250 V, AC-1) NO 100000 cycles (6 A at 250 V, AC-1) NC
Operating time	20 ms operating 10 ms reset
Average coil consumption	0.45 W DC
Drop-out voltage threshold	>= 0.1 U <sub>c</sub> DC
Safety reliability data	B10d = 100000
Protection category	RT I
Operating position	Any position
Product weight	0.014 kg
Device presentation	Complete product

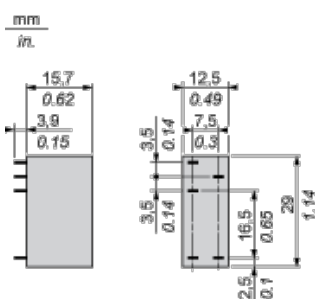
### Environment

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 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)

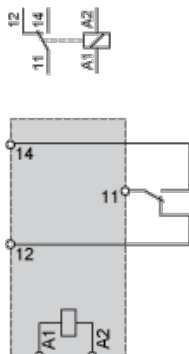
### Contractual warranty

Warranty period	18 months
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### Dimensions



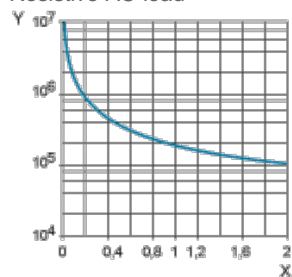
### Wiring Diagram



### Electrical Durability of Contacts

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

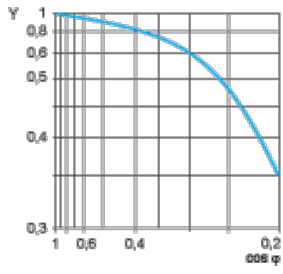
Resistive AC load



X Switching capacity (kVA)

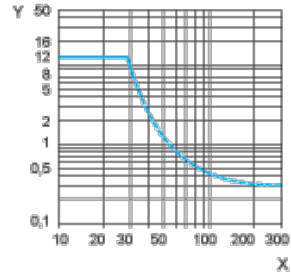
Y Durability (Number of operating cycles)

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.