



### 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	230 V AC
[Ithe] conventional enclosed thermal current	12 A at -40...40 °C
Status LED	1 LED
Control type	Without
Sale per indivisible quantity	30

### Complementary

Average resistance	32500 Ohm (AC) at 20 °C +/- 15 %
[Ue] rated operational voltage	180...250 V, 50/60 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 (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	10 mA
Maximum switching voltage	250 V
Switching voltage	12 V
Maximum switching capacity	3000 VA (AC) 336 W (DC)
Load current	12 A at 250 V AC 12 A at 28 V DC
Minimum switching capacity	120 mW at 10 mA / 12 V
Operating rate	<= 600 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical durability	10000000 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 20 ms reset
Average coil consumption	0.75 VA AC
Drop-out voltage threshold	>= 0.15 U <sub>c</sub> AC

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Safety reliability data	B10d = 100000
Protection category	RT I
Test levels	Level A group mounting
Operating position	Any position
Torque value	0.8 N.m 7 lbf.in
Connections - terminals	Connector, clamping capacity: 1 x 0.25...1 x 2.5 mm <sup>2</sup> , AWG 22...AWG 14 flexible-with cable end Connector, clamping capacity: 2 x 0.25...2 x 1 mm <sup>2</sup> , AWG 22...AWG 17 flexible-with cable end Connector, clamping capacity: 1 x 0.5...1 x 2.5 mm <sup>2</sup> , AWG 20...AWG 14 solid-without cable end Connector, clamping capacity: 2 x 0.5...2 x 1.5 mm <sup>2</sup> , AWG 20...AWG 16 solid-without cable end
Product weight	0.05 kg
Device presentation	Complete product
Compatibility code	RSB

## Environment

Dielectric strength	1000 V AC between contacts 5000 V AC between coil and contact
Standards	IEC 61984 CSA C22.2 No 14 UL 508 EN/IEC 61810-1
Product certifications	UL RoHS CSA REACH EAC CE
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	IP20 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...70 °C (AC)

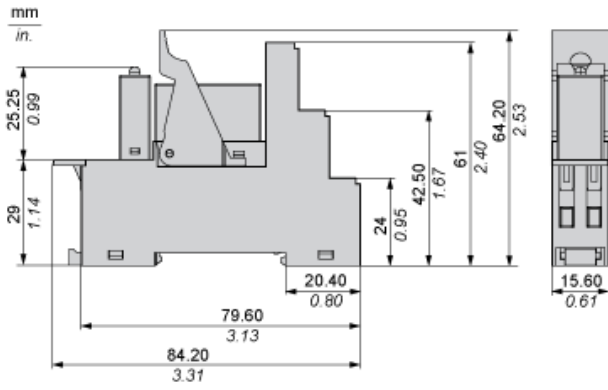
## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1831 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Product Environmental Profile</a>
Product end of life instructions	Need no specific recycling operations

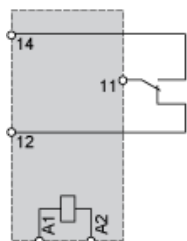
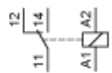
## Contractual warranty

Warranty period	18 months
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Dimensions



## Wiring Diagram

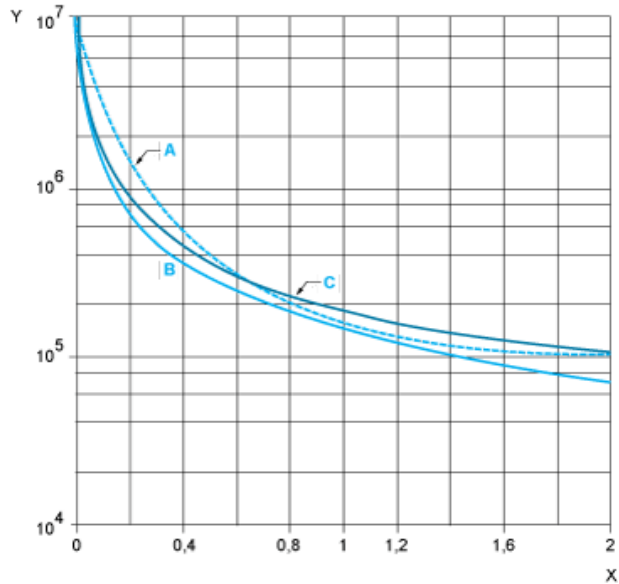


NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

Electrical Durability of Contacts

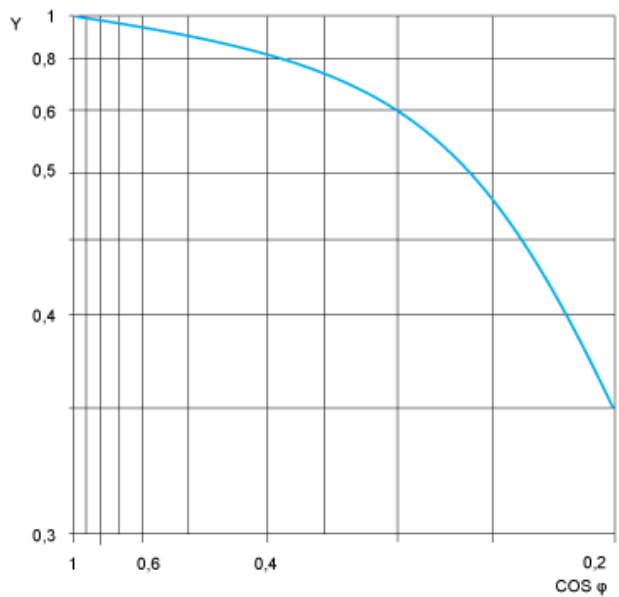
Durability (Inductive Load) = Durability (Resistive Load) x Reduction Coefficient.

Resistive AC Load



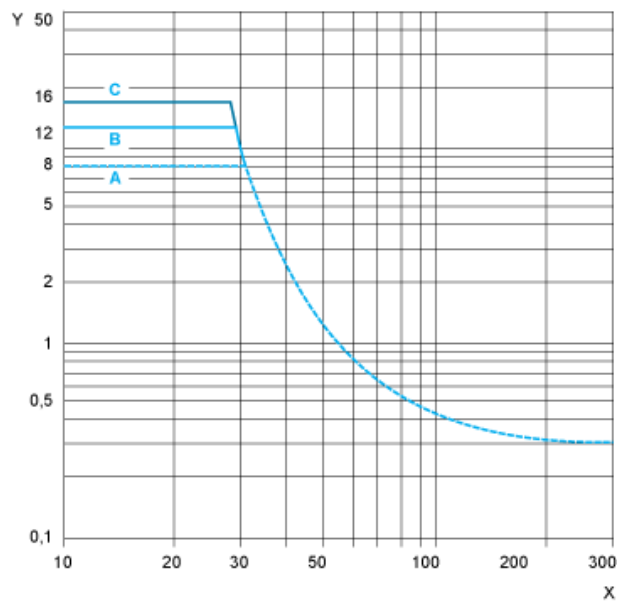
- (y) Durability (Number of operating cycles)
- (x) Switching capacity (kVA)
- A : RSB2A080●●
- B : RSB1A160●●
- C : RSB1A120●●

Reduction Coefficient for Inductive AC Load (Depending on Power Factor  $\cos \phi$ )



- (y) Reduction coefficient (A)

### Maximum Switching Capacity on Resistive DC Load



- (y) Current DC
- (x) Voltage DC
- A : RSB2A080●●
- B : RSB1A160●●
- C : RSB1A120●●

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

Product Life Status : **Commercialised**