

Main

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| 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 | 1 LED |
| Control type | Without |
| Sale per indivisible quantity | 30 |

Complementary

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|--|---|
| Average resistance | 360 Ohm (DC) at 20 °C +/- 10 % |
| [Ue] rated operational voltage | 9.6...13.2 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 |
| Switching voltage | 5 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 | 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 20 ms reset |
| Average coil consumption | 0.45 W DC |
| Drop-out voltage threshold | >= 0.1 U _c DC |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance 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.

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

Environment

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| Dielectric strength | 1000 V AC between contacts 5000 V AC between coil and contact |
| Standards | EN/IEC 61810-1 IEC 61984 UL 508 CSA C22.2 No 14 |
| Product certifications | CE CSA RoHS UL REACH 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 | 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...85 °C (DC) |

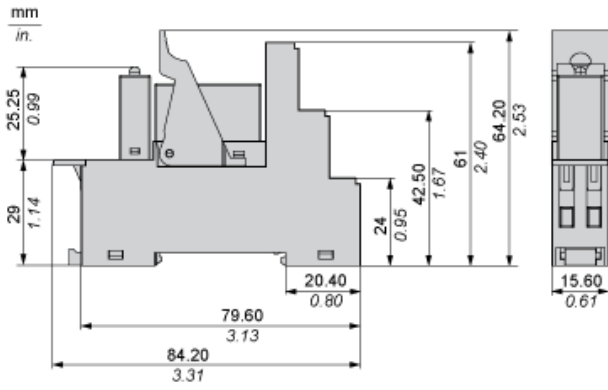
Offer Sustainability

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|----------------------------------|--|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant Schneider Electric Declaration Of Conformity |
| REACH | Reference not containing SVHC above the threshold |
| Product environmental profile | Available Product Environmental Profile |
| Product end of life instructions | Need no specific recycling operations |

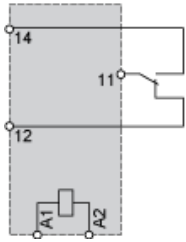
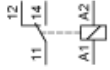
Contractual warranty

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| Warranty period | 18 months |
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Dimensions



Wiring Diagram

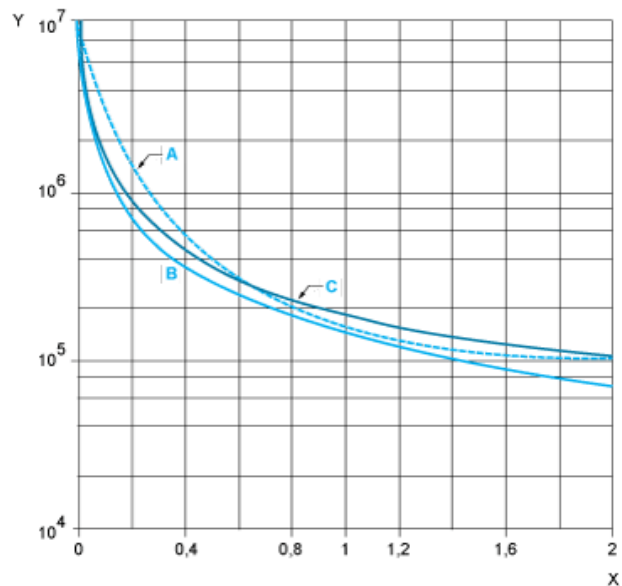


NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

Electrical Durability of Contacts

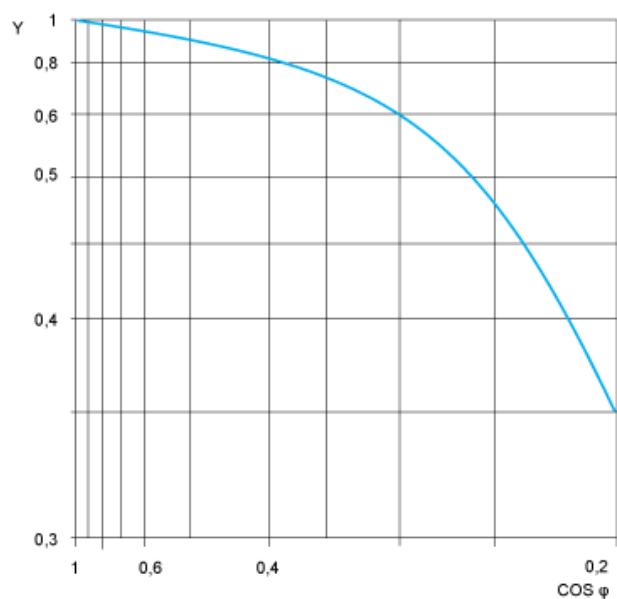
Durability (Inductive Load) = Durability (Resistive Load) x Reduction Coefficient.

Resistive AC Load



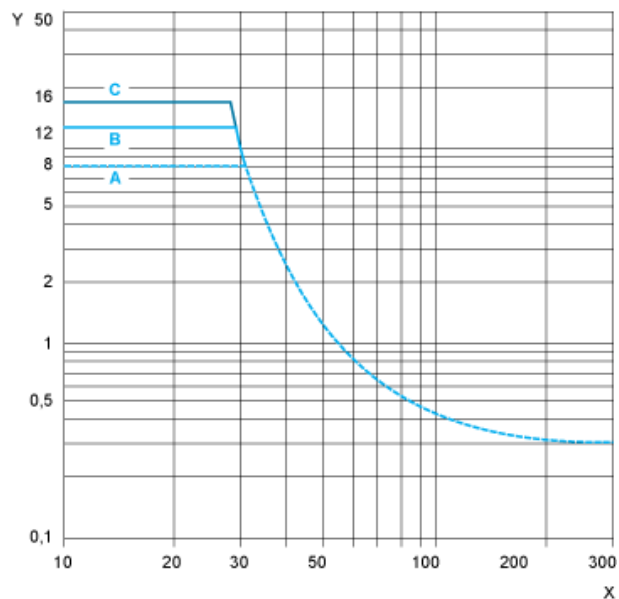
- (y) Durability (Number of operating cycles)
- (x) Switching capacity (kVA)
- A : RSB2A080●●
- B : RSB1A160●●
- C : RSB1A120●●

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