Product data sheet Characteristics

RSB1A160P7S

Harmony, Interface plug-in relay with socket, 16 A, 1 CO, 230 V AC



Main

| Range of product | Harmony Electromechanical Relays |
|--|----------------------------------|
| 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 |
| [Ithe] conventional enclosed thermal current | 16 A at -4040 °C |
| Status LED | Without |
| Control type | Without push-button |

Complementary

| Complementary | |
|--|---|
| Shape of pin | Flat |
| Average coil resistance | 38500 Ohm network: AC at 20 °C +/- 15 % |
| [Ue] rated operational voltage | 184276 V AC 50 Hz 195.5276 V AC 60 Hz |
| [Ui] rated insulation voltage | 400 V conforming to EN/IEC 60947 |
| [Uimp] rated impulse withstand voltage | IEC 61000-4-5 3.6 kV |
| Contacts material | Silver alloy (Ag/Ni) |
| [le] rated operational current | 16 A (AC-1/DC-1) NO conforming to IEC 8 A (AC-1/DC-1) NC conforming to IEC |
| Minimum switching current | 5 mA |
| Maximum switching voltage | 300 V DC 400 V AC |
| Minimum switching voltage | 5 V |
| Maximum switching capacity | 4000 VA AC 448 W DC |
| Resistive rated load | 16 A at 250 V AC 16 A at 28 V DC |
| Minimum switching capacity | 300 mW at 5 mA |
| Operating rate | <= 600 cycles/hour under load <= 72000 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 | 10 ms between coil de-energisation and making of the Off-delay contact 12 ms between coil energisation and making of the On-delay contact |
| Marking | CE |
| Average coil consumption | 0.75 VA AC 60 Hz |
| Drop-out voltage threshold | >= 0.15 Uc AC |
| Safety reliability data | B10d = 100000 |
| Protection category | RT I |
| Operating position | Any position |
| Sale per indivisible quantity | 10 |
| 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 | CSA C22.2 No 14 |
| | EN/IEC 61810-1 |
| | UL 508 |
| Product certifications | CSA |
| | UL |
| | GOST |
| 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 | 10 gn (duration = 11 ms) for not operating conforming to EN/IEC 60068-2-27 |
| | 5 gn (duration = 11 ms) for in operation conforming to EN/IEC 60068-2-27 |
| Ambient air temperature for operation | -4070 °C (AC) |
| | -4085 °C (DC) |

Packing Units

| . doming office | |
|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 70 g |
| Package 1 Height | 8 cm |
| Package 1 width | 10 cm |
| Package 1 Length | 34 cm |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 20 |
| Package 2 Weight | 1.4 kg |
| Package 2 Height | 7.5 cm |
| Package 2 width | 10.4 cm |
| Package 2 Length | 34 cm |
| Unit Type of Package 3 | S03 |
| Number of Units in Package 3 | 140 |
| Package 3 Weight | 9.855 kg |
| Package 3 Height | 30 cm |
| Package 3 width | 30 cm |
| Package 3 Length | 40 cm |
| | |

Offer Sustainability

| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
|----------------------------|---|
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | ₫Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

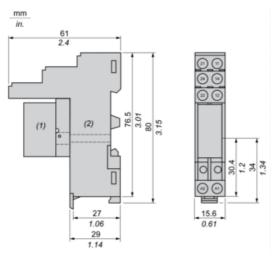
Contractual warranty

| Warranty | 18 months | |
|----------|-----------|--|

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Dimensions

Relay Complete with Socket



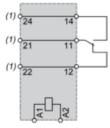
- (1) Relays
- (2) Socket

Product data sheet Connections and Schema

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Wiring Diagram





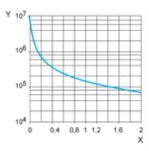
(1) Terminals 11 and 21,14 and 24,12 and 22 must be linked for this references NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

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Electrical Durability of Contacts

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

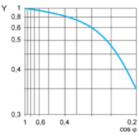
Resistive AC load



X Switching capacity (kVA)

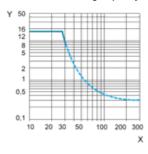
Y Durability (Number of operating cycles)

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.