

SSP1A450BD

Harmony, Solid state relay, 50 A, DIN rail mount, zero voltage switching, input 4...32 V DC, output 48...660 V AC



Main

| | |
|---------------------------|--------------------------------------|
| Range of Product | Harmony Solid State Relays |
| Product or Component Type | Solid state relay up to 50 A |
| Device short name | SSP1 |
| Mounting Support | Panel |
| Number of phases | 1 phase |
| Line Rated Current | 50 A |
| Solid state output type | Zero voltage switching SCR output |
| Output switching mode | Zero voltage switching |

Complementary

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|--|---|
| [Uc] control circuit voltage | 4...32 V DC |
| Minimum switching voltage | 4 V DC turn-on |
| Maximum switching voltage | 1 V DC turn-off |
| Response time | 0.5 cycle (turn-on) 0.5 cycle (turn-off) |
| Input current | 7...12 mA |
| Output voltage | 48...660 V AC |
| Load current | 0.15...50 A |
| Transient overvoltage | 1200 V |
| Surge current | 625 A 16.6 ms |
| Maximum I ² t for fusing | 1770 A ² .S for 10 ms at 50 Hz 1629 A ² .s for 8.33 ms at 60 Hz |
| Co-ordination type | Type 1 - 40 A miniature circuit breaker (MCB) B Type 2 - 32 A miniature circuit breaker (MCB) B |
| Maximum leakage current | 1 mA off-state |
| Maximum voltage drop | <1.15 V on-state |
| DV/dt | 500 V/μs off-state at maximum voltage |
| Power factor | 0.5 (with maximum load) |
| Motor controller rating | 0.75 Hp 120 V AC 2 Hp 240 V AC 5 hp 480 V AC |
| Insulation resistance | 1000 MOhm at 500 V DC |
| Maximum capacitance | 8 pF for input/output |
| Dielectric strength | 4 KV AC for input/output 4 kV AC for input or output to case |
| [Uimp] rated impulse withstand voltage | 6 KV output to case 6 kV input to output |
| Tightening torque | 1.5...1.7 N.m for input 2...2.2 N.m for output |
| Connections - terminals | Screw terminals 0.2...3.3 mm ² , AWG 24...AWG 12) with cable end input Screw terminals 0.5...5.26 mm ² , AWG 20...AWG 10) with cable end output Screw terminals 0.2...3.3 mm ² , AWG 24...AWG 12) without cable end input Screw terminals 0.5...8.26 mm ² , AWG 20...AWG 8) without cable end output Forked type tag connectors 9.2 x 4 mm input Ring lugs 9.2 x 4 mm input Forked type tag connectors 11.7 x 4.5 mm output Ring lugs 11.7 x 4.5 mm output |

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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|-------------------------|--|
| Thermal resistance | 0.45 °C/W junction to case |
| LED indicator | LED, green input |
| IP degree of protection | IP20 |
| Safety reliability data | B10d = 1731395 MTTFd = 1875.9 years |
| Net Weight | 3.15 oz (89.2 g) |
| Device presentation | Complete product |

Environment

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|---------------------------------------|--|
| Ambient Air Temperature for Operation | -40...176 °F (-40...80 °C) |
| Ambient Air Temperature for Storage | -40...257 °F (-40...125 °C) |
| Pollution degree | 2 |
| Overvoltage category | III |
| Product Certifications | CSA UL EAC CE |
| Marking | UL CSA EAC CE |
| Standards | CSA C22.2 No 14-13 EN/IEC 60950-1 EN/IEC 62314 UL 508 |




Ordering and shipping details

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|-----------------------|---------------------------------|
| Category | 22375-INTERFACE MODULE(ABA,R,S) |
| Discount Schedule | CP2 |
| GTIN | 3606485441870 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 3.39 oz (96.0 g) |
| Returnability | No |
| Country of origin | MX |

Packing Units

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|------------------------------|-----------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 1.50 in (3.8 cm) |
| Package 1 width | 1.89 in (4.8 cm) |
| Package 1 Length | 2.64 in (6.7 cm) |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 30 |
| Package 2 Weight | 6.92 lb(US) (3.14 kg) |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 width | 5.91 in (15 cm) |
| Package 2 Length | 15.75 in (40 cm) |

Offer Sustainability

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|----------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation |  REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information |  Yes |

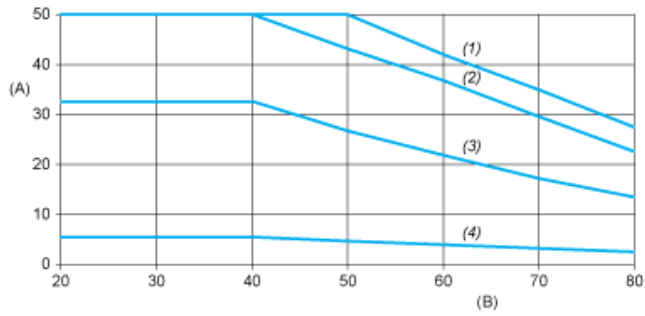
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|--------------------------|---|
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |

Dimensions



- (1) Front view
- (2) Side view
- (3) Bottom view

Derating Curves



- A : Load Current (Arms)
- B : Ambient Temperature (°C)
- (1) For Heatsink SSRHP07
- (2) For Heatsink SSRHD10
- (3) For Heatsink SSRHP17
- (4) No Heatsink