

SSP1A125BDT

Solid state relay, Harmony, 25A, panel mount, zero voltage switching, thermal pad, input 3...32V DC, output 24...300V AC



Main

| | |
|---------------------------|--------------------------------------|
| Range of Product | Harmony Solid State Relays |
| Product or Component Type | Solid state relay up to 30 A |
| Provided accessory | Thermal pad |
| Device short name | SSP1 |
| Mounting Support | Panel |
| Number of phases | 1 phase |
| Line Rated Current | 25 A |
| Solid state output type | SCR output Zero voltage switching |
| Output switching mode | Zero voltage switching |

Complementary

| | |
|--|---|
| [Uc] control circuit voltage | 3...32 V DC |
| Minimum switching voltage | 3 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 | 10 mA at 12 V DC |
| Output voltage | 24...300 V AC |
| Load current | 0.15...25 A |
| Transient overvoltage | 600 V |
| Surge current | 250 A 16.6 ms |
| Maximum I ² t for fusing | 259 A ² .S for 8.33 ms at 60 Hz 285 A ² .s for 10 ms at 50 Hz |
| Co-ordination type | Type 1 - 25 A miniature circuit breaker (MCB) B Type 2 - 20 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 | 0.5 Hp 120 V AC 1 hp 240 V AC |
| Insulation resistance | 1000 MOhm at 500 V DC |
| Maximum capacitance | 10 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 |
| Thermal resistance | 0.8 °C/W junction to case |

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| | |
|-------------------------|--|
| Thermal pad impedance | 0.48 °C-in ² /W at 25 psi |
| 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 | EAC CE UL CSA |
| Marking | UL CE CSA EAC |
| Standards | UL 508 EN/IEC 60950-1 EN/IEC 62314 CSA C22.2 No 14-13 |

Ordering and shipping details

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|-------------------|---------------------------------|
| Category | 22375-INTERFACE MODULE(ABA,R,S) |
| Discount Schedule | CP2 |
| GTIN | 3606485442044 |
| Returnability | Yes |
| Country of origin | MX |

Packing Units

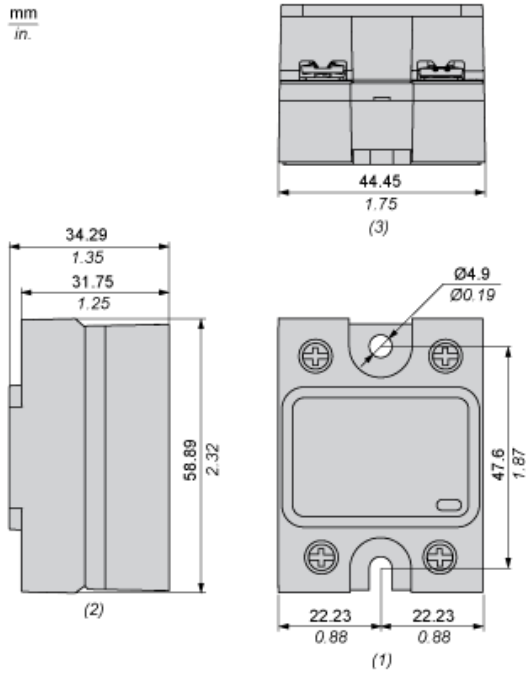
| | |
|------------------------------|------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 1.50 in (3.8 cm) |
| Package 1 Width | 1.89 in (4.8 cm) |
| Package 1 Length | 2.56 in (6.5 cm) |
| Package 1 Weight | 3.42 oz (97.0 g) |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 30 |
| Package 2 Height | 5.91 in (15.0 cm) |
| Package 2 Width | 5.91 in (15.0 cm) |
| Package 2 Length | 15.75 in (40.0 cm) |
| Package 2 Weight | 7.16 lb(US) (3.246 kg) |

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 |
| China RoHS Regulation | China RoHS Declaration |

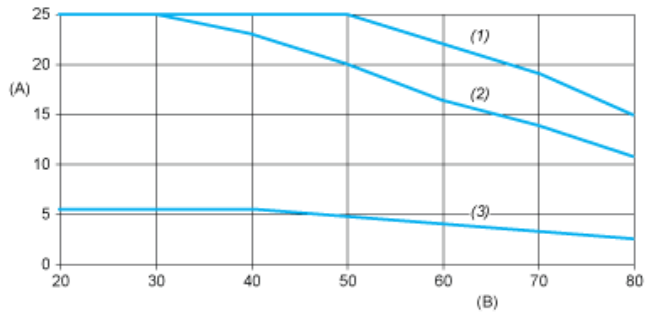
| | |
|----------------------------|---|
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |

Dimensions



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

Derating Curves



- A : Load Current (Arms)
- B : Ambient Temperature (°C)
- (1) For Heatsink SSRHP17
- (2) For Heatsink SSRHP25
- (3) No Heatsink