

SSP1A490M7T

Harmony, Solid state relay, 90 A, panel mount, zero voltage switching, thermal pad, input 90...280 V AC, output 48...660 V AC



Main

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|---------------------------|--------------------------------------|
| Range of Product | Harmony Solid State Relays |
| Product or Component Type | Solid state relay up to 125 A |
| Provided accessory | Thermal pad |
| Device short name | SSP1 |
| Number of phases | 1 phase |
| Line Rated Current | 90 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 | 90...280 V AC |
| Minimum switching voltage | 90 V AC turn-on |
| Maximum switching voltage | 10 V AC turn-off |
| Response time | 30 ms (turn-off) 25 ms (turn-on) |
| Input current | 5...10 mA |
| Output voltage | 48...660 V AC |
| Load current | 0.15...90 A |
| Transient overvoltage | 1200 V |
| Surge current | 1200 A 16.6 ms |
| Maximum I ² t for fusing | 5976 A ² .S for 8.33 ms at 60 Hz 6560 A ² .s for 10 ms at 50 Hz |
| Co-ordination type | Type 1 - 63 A miniature circuit breaker (MCB) B Type 2 - 50 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 | 1.5 Hp 120 V AC 3 Hp 240 V AC 7.5 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 |
| Thermal resistance | 0.27 °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 CSA UL CE |
| Marking | UL CSA EAC CE |
| Standards | EN/IEC 62314 UL 508 CSA C22.2 No 14-13 EN/IEC 60950-1 |




Ordering and shipping details

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|-----------------------|-----------------------------------|
| Category | 22375 - INTERFACE MODULE(ABA,R,S) |
| Discount Schedule | CP2 |
| GTIN | 3606485442174 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 3.60 oz (102 g) |
| Returnability | Yes |
| Country of origin | MX |

Packing Units

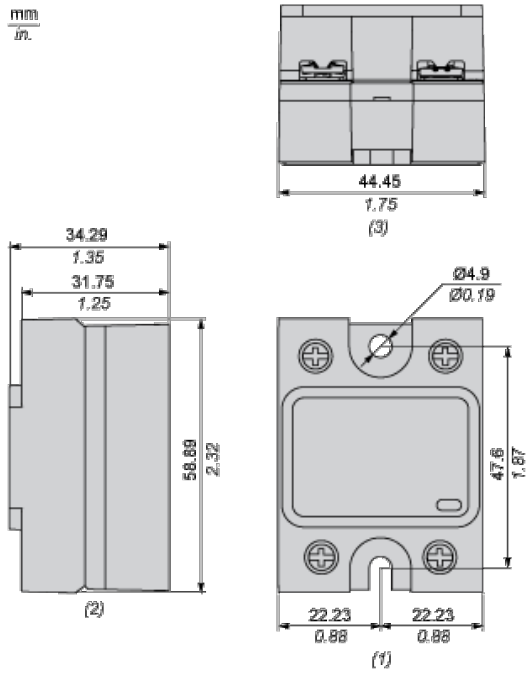
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|------------------------------|------------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 1.50 in (3.8 cm) |
| Package 1 width | 1.89 in (4.8 cm) |
| Package 1 Length | 2.56 in (6.5 cm) |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 30 |
| Package 2 Weight | 7.24 lb(US) (3.285 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 |

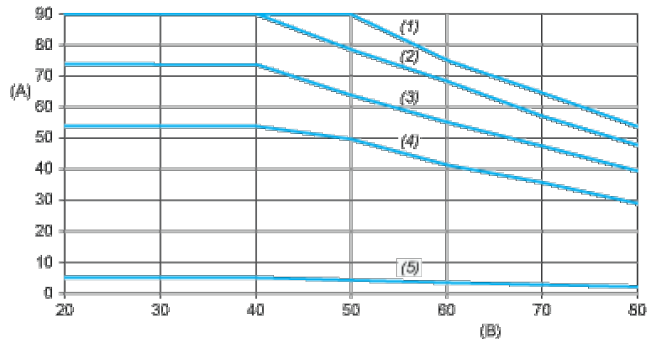
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|--------------------------|---|
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |

Dimensions



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

Derating Curves



- A : Load Current (Arms)
B : Ambient Temperature (°C)
(1) For Heatsink SSRHP02
(2) For Heatsink SSRHP05
(3) For Heatsink SSRHP07
(4) For Heatsink SSRHD10
(5) No Heatsink