## **Product data sheet**

Specifications





single phase relay, Harmony Solid State Relays, 50A, panel mount, zero voltage switching, thermal pad, input 90 to 280V AC, output 24 to 300V AC

SSP1A150M7T

Product availability: Stock - Normally stocked in distribution facility

Price\*: 38.47 USD

### Main

| Range Of Product          | Harmony Solid State Relays           |  |
|---------------------------|--------------------------------------|--|
| Provided Accessory        | Thermal pad                          |  |
| Product Or Component Type | Solid state relay up to 50 A         |  |
| Device Short Name         | SSP1                                 |  |
| Number Of Phases          | 1 phase                              |  |
| Line Rated Current        | 50 A                                 |  |
| Solid State Output Type   | Zero voltage switching<br>SCR output |  |
| Output Switching Mode     | Zero voltage switching               |  |

### Complementary

| 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                       | 510 mA  |  |
| Load Current                        | 0.1550 A  |  |
| Transient Overvoltage               | 600 V   |  |
| Surge Current                       | 625 A 16.6 ms   |  |
| Maximum I <sup>2</sup> T For Fusing | 1621 A <sup>2</sup> .s for 8.33 ms at 60 Hz<br>1770 A <sup>2</sup> .s for 10 ms at 50 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<br>2 hp 240 V AC   |  |
| Insulation Resistance               | 1000 MOhm at 500 V DC   |  |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| Marrian Canasitanas            |  |  |
|--------------------------------|--|--|
| 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 | 6 kV output to case  |  |
| Voltage                        | 6 kV input to output   |  |
| Tightening Torque              | 1.51.7 N.m for input   |  |
|                                | 22.2 N.m for output  |  |
| Connections - Terminals        | Screw terminals 0.23.3 mm², AWG 24AWG 12) with cable end input     |  |
|                                | Screw terminals 0.55.26 mm², AWG 20AWG 10) with cable end output   |  |
|                                | Screw terminals 0.23.3 mm², AWG 24AWG 12) without cable end input  |  |
|                                | Screw terminals 0.58.26 mm², AWG 20AWG 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             | 0.45 °C/W junction to case   |  |
| Thermal Pad Impedance          | 0.48 °C-in²/W at 25 psi  |  |
| Led Indicator                  | LED, green input   |  |
| Ip Degree Of Protection        | IP20   |  |
| Safety Reliability Data        | MTTFd = 1875.9 years   |  |
|                                | B10d = 1731395   |  |
| Net Weight                     | 3.15 oz (89.2 g)   |  |
| Device Presentation            | Complete product   |  |

## **Environment**

| Ambient Air Temperature For Operation | -40176 °F (-4080 °C)                                     |
|---------------------------------------|--|
| Ambient Air Temperature For Storage   | -40257 °F (-40125 °C)                                    |
| Pollution Degree                      | 2  |
| Overvoltage Category                  | III  |
| Product Certifications                | UL<br>CSA<br>CE<br>EAC                                   |
| Marking                               | CE<br>UL<br>CSA<br>EAC                                   |
| Standards                             | UL 508<br>CSA C22.2 No 14-13<br>IEC 60950-1<br>IEC 62314 |

## Ordering and shipping details

| Category          | US10CP222375  |  |
|-------------------|---------------|--|
| Discount Schedule | 0CP2          |  |
| Gtin              | 3606485442136 |  |
| Returnability     | No            |  |
| 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             | 3.53 oz (100 g)        |
| Unit Type Of Package 2       | S01                    |
| Number Of Units In Package 2 | 30                     |
| Package 2 Height             | 5.91 in (15 cm)        |
| Package 2 Width              | 5.91 in (15 cm)        |
| Package 2 Length             | 15.75 in (40 cm)       |
| Package 2 Weight             | 7.33 lb(US) (3.325 kg) |

## Sustainability Green Premium

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

## Well-being performance



Mercury Free



Rohs Exemption Information

Yes

## **Certifications & Standards**

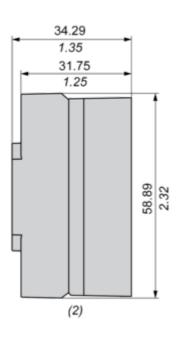
| Reach Regulation          | REACh Declaration   |
|---------------------------|---|
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope)  |
| China Rohs Regulation     | China RoHS declaration  |
| Environmental Disclosure  | Product Environmental Profile   |
| Circularity Profile       | End of Life Information   |
| 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 |

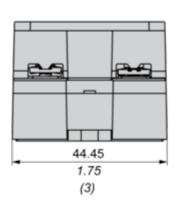
Jun 3, 2024

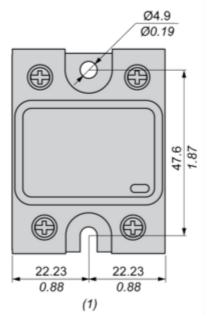
### **Dimensions Drawings**

#### **Dimensions**

 $\frac{\text{mm}}{in.}$ 



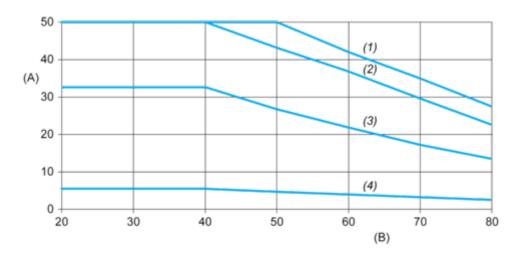




- (1) Front view
- (2) Side view
- (3) Bottom view

#### Performance Curves

## **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