

# SSP1A490M7

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



Product availability: Non-Stock - Not normally stocked in distribution facility

Price\*: 81.99 USD



## Main

|                           |                                      |
|---------------------------|--------------------------------------|
| Range of Product          | Harmony Solid State Relays           |
| Product or Component Type | Solid state relay up to 125 A        |
| Device short name         | SSP1                                 |
| Mounting Support          | Panel                                |
| Phase                     | 1 phase                              |
| Line Rated Current        | 90 A                                 |
| Solid state output type   | SCR output<br>Zero voltage switching |
| Output switching mode     | Zero voltage switching               |

## Complementary

|                                     |  |
|-------------------------------------|--|
| [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)<br>25 ms (turn-on)  |
| Input current limits                | 5...10 MA  |
| Output voltage                      | 48...660 V AC  |
| Load current                        | 0.15...90 A  |
| Absolute maximum voltage            | 1200 V   |
| Surge current                       | 1200 A 16.6 ms   |
| Maximum I <sup>2</sup> t for fusing | 5976 A <sup>2</sup> .S for 8.33 ms at 60 Hz<br>6560 A <sup>2</sup> .S for 10 ms at 50 Hz           |
| Protection device type              | Type 1 - 63 A miniature circuit breaker (MCB) B<br>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  |
| Cos phi                             | 0.5 (with maximum load)  |

|  |   |
|--|---|
| Maximum Horse Power Rating             | 1.5 Hp 120 V AC<br>3 Hp 240 V AC<br>7.5 Hp 480 V AC   |
| Insulation resistance                  | 1000 MOhm at 500 V DC   |
| Capacitance unbalance                  | 8 PF for input/output   |
| Dielectric strength                    | 4 KV AC for input/output<br>4 KV AC for input or output to case   |
| [Uimp] rated impulse withstand voltage | 6 KV output to case<br>6 KV input to output   |
| Tightening torque                      | 1.5...1.7 N.m for input<br>2...2.2 N.m for output   |
| Connections - terminals                | Screw terminals 0.2...3.3 mm <sup>2</sup> , AWG 24...AWG 12) with cable end input<br>Screw terminals 0.5...5.26 mm <sup>2</sup> , AWG 20...AWG 10) with cable end output<br>Screw terminals 0.2...3.3 mm <sup>2</sup> , AWG 24...AWG 12) without cable end input<br>Screw terminals 0.5...8.26 mm <sup>2</sup> , AWG 20...AWG 8) without cable end output<br>Forked type tag connectors 9.2 x 4 mm input<br>Ring lugs 9.2 x 4 mm input<br>Forked type tag connectors 11.7 x 4.5 mm output<br>Ring lugs 11.7 x 4.5 mm output |
| Thermal resistance                     | 0.27 °C/W junction to case  |
| Local signalling                       | LED, green input  |
| IP degree of protection                | IP20  |
| Safety reliability data                | B10d = 1731395<br>MTTFd = 1875.9 years  |
| Net Weight                             | 3.15 Oz (89.2 g)  |
| Device presentation                    | Complete product  |

## Environment

|                                       |  |
|---------------------------------------|--|
| 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                | UL<br>EAC<br>CSA<br>CE   |
| Marking                               | EAC<br>UL<br>CSA<br>CE   |
| Standards                             | UL 508<br>EN/IEC 62314<br>EN/IEC 60950-1<br>CSA C22.2 No 14-13 |

## Ordering and shipping details

|                       |                                   |
|-----------------------|-----------------------------------|
| Category              | 22375 - INTERFACE MODULE(ABA,R,S) |
| Discount Schedule     | CP2                               |
| GTIN                  | 03606485441986                    |
| Nbr. of units in pkg. | 1                                 |
| Package weight(Lbs)   | 3.56 Oz (101 g)                   |
| Returnability         | No                                |
| Country of origin     | MX                                |

## Packing Units

|                        |                  |
|------------------------|------------------|
| Unit Type of Package 1 | PCE              |
| Package 1 Height       | 1.54 In (3.9 cm) |
| Package 1 width        | 1.85 In (4.7 cm) |
| Package 1 Length       | 2.40 In (6.1 cm) |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>  |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |

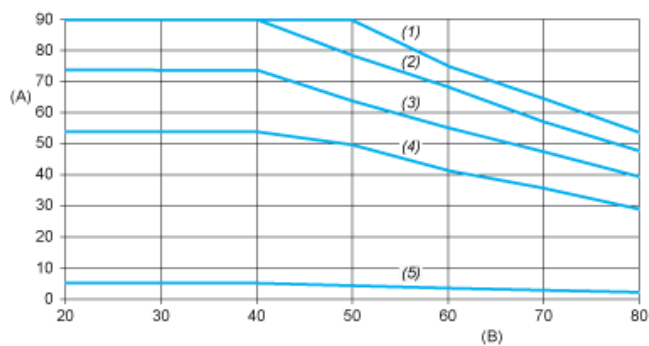
Dimensions

mm  
in.



- (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

Product Life Status : **Commercialised**