Product data sheet

Specification





single phase panel, Harmony Solid State Relays, 50A, panel mount, zero voltage switching, thermal pad, input 90...280V AC, output 48...660V AC

SSP1A450M7T

① Discontinued

! Discontinued on: Aug 15, 2024

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

Price*: 75.33 USD

Main

Range of Product	Harmony Solid State Relays	
Provided accessory	Thermal pad	
Product or Component Type	Panel mount relay	
Device short name	SSP1	
Number of phases	1 phase	
Line Rated Current	50 A	
solid state output type	SCR output Zero voltage switching	
Output switching mode	Zero voltage switching	

Complementary

test button	Without test button	
[Uc] control circuit voltage	90280 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	510 mA	
Output voltage	48660 V AC	
load current	0.1550 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	

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

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	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	B10d = 1731395	
	MTTFd = 1875.9 years	
Net Weight	3.1 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	CE UL CSA EAC	
marking	EAC UL CSA CE	
Standards	dards IEC 60950-1 CSA C22.2 No 14-13 UL 508 IEC 62314	

Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
GTIN	3606485442143

Returnability	No	
Country of origin	MX	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.496 in (3.800 cm)
Package 1 Width	1.890 in (4.800 cm)
Package 1 Length	2.559 in (6.500 cm)
Package 1 Weight	3.594 oz (101.900 g)
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	5.906 in (15.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	7.125 lb(US) (3.232 kg)

Sustainability Green Premium

Green PremiumTM **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-CO₂ 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

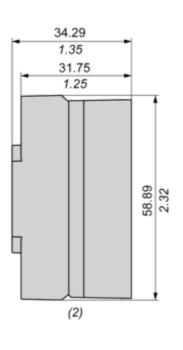
Certifications & Standards

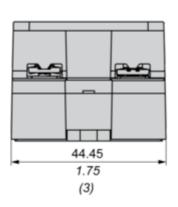
Reach Regulation	REACh Declaration	
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
California Proposition 65	"WARNING: This 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"	

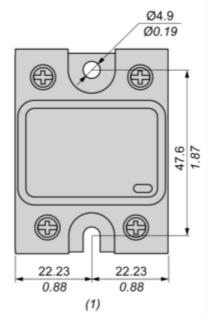
Dimensions Drawings

Dimensions

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



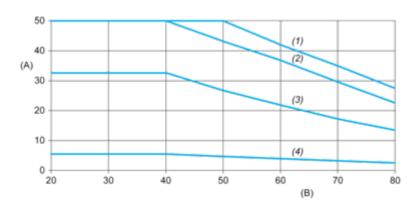




- (1) Front view
- (2) Side view
- (3) Bottom view

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