Product data sheet

Specification





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

SSP1A450M7

Product availability: Stock - Normally stocked in distribution facility

Price*: 47.92 USD

Main

Range of Product	Harmony Solid State Relays	
Product or Component Type	Panel mount relay	
Device short name	SSP1	
Mounting Support	Panel	
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	
DV/dt	500 V/μs off-state at maximum voltage	
Power factor	0.5 (with maximum load)	

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

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	
2 hp 240 V AC 5 hp 480 V AC	
5 hp 480 V AC	
Insulation resistance 1000 MOhm at 500 V DC	
1000 MOIIII 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	
Screw terminals 0.55.26 mm², AWG 20AWG 10) with cable el	nd 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	
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	EAC CE CSA UL
marking	EAC CE UL CSA
Standards	IEC 60950-1 CSA C22.2 No 14-13 IEC 62314 UL 508

Ordering and shipping details

Category	US1000I22000	
Discount Schedule	0001	
GTIN	3606485441955	
Returnability	Yes	
Country of origin	MX	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.5 in (3.9 cm)
Package 1 Width	1.9 in (4.7 cm)
Package 1 Length	2.6 in (6.6 cm)
Package 1 Weight	3.5 oz (99.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	5.9 in (15.0 cm)
Package 2 Width	5.9 in (15.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	7.381 lb(US) (3.348 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

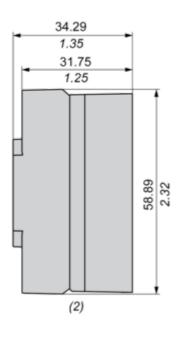
Certifications & Standards

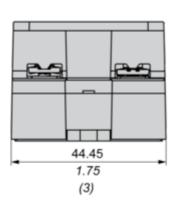
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
California Proposition 65	"WARNING: This product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

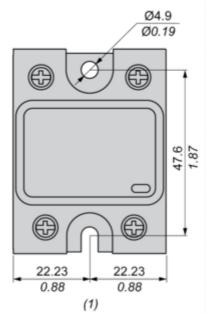
Dimensions Drawings

Dimensions

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



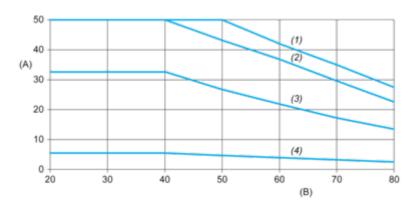




- (1) Front view
- (2) Side view
- (3) Bottom view

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