Product data sheet

Specifications



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

SSP1A450M7T

Discontinued

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

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	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…50 A
Transient overvoltage	1200 V
Surge current	625 A 16.6 ms
Maximum I²t for fusing	1770 A².s for 10 ms at 50 Hz 1629 A².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.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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 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 mm², 24 AWG...12 AWG) with cable end input Screw terminals 0.5...5.26 mm², 20 AWG...10 AWG) with cable end output Screw terminals 0.2...3.3 mm², 24 AWG...12 AWG) without cable end input Screw terminals 0.5...8.26 mm², 20 AWG...8 AWG) 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	-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	CE UL CSA EAC
Marking	EAC UL CSA CE
Standards	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

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	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 weight(Lbs)	3.594 oz (101.900 g)
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	5.9 in (15 cm)
Package 2 Width	5.9 in (15 cm)
Package 2 Length	15.7 in (40 cm)
Package 2 Weight	7.125 lb(US) (3.232 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	134201bc-d293-4667-9cca-10a7f11729e0
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
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

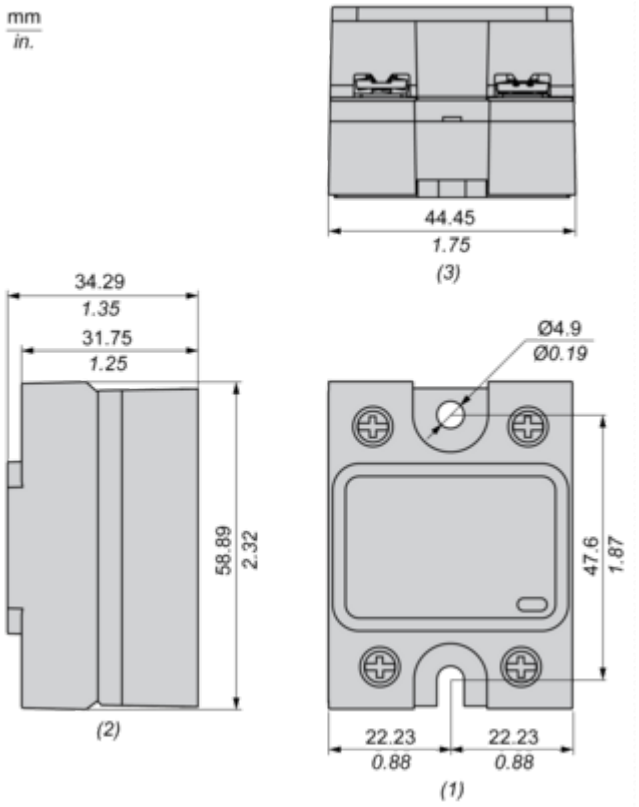
Use Again

Repack and remanufacture

Circularity Profile	End of Life Information

Dimensions Drawings

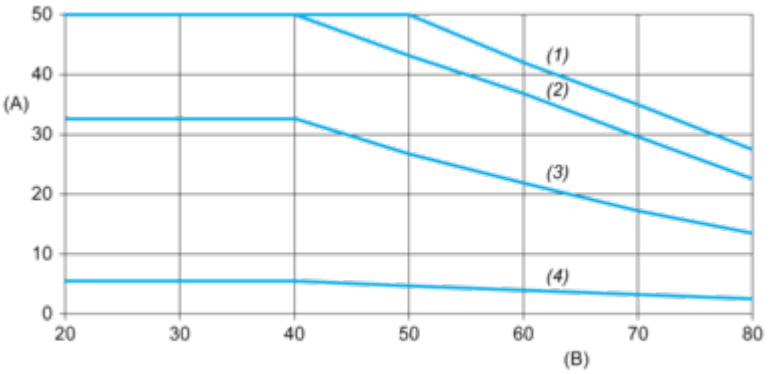
Dimensions



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

Performance Curves

Derating Curves



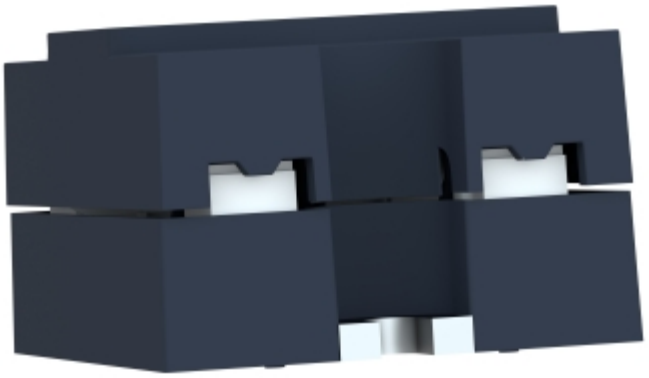
A : Load Current (Arms)
B : Ambient Temperature (°C)
(1) For Heatsink SSRHP07
(2) For Heatsink SSRHD10
(3) For Heatsink SSRHP17
(4) No Heatsink

Image of product / Alternate images

Alternative








- 1
2 +
Input
Schneider Electric
- 4
3 +



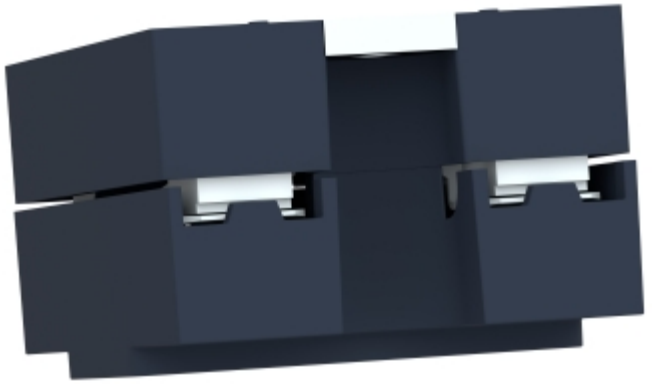


Image of product in real life situation

