Product datasheet

Specifications





Solid state relay, Harmony, 75A, panel mount, zero voltage switching, thermal pad, input 90…280V AC, output 24…300V AC

SSP1A175M7T

! Discontinued

- ! Discontinued on: 19 Dec 2023
- ! To be end-of-service on: 31 Dec 2030

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
[In] rated current	75 A
solid state output type	Zero voltage switching SCR output
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	24300 V AC
load current	0.1575 A
Transient overvoltage	600 V
Surge current	1000 A for 16.6 ms
Maximum I ² t for fusing	4150 A ² .s for 8.33 ms at 60 Hz 4555 A ² .s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 50 A miniature circuit breaker (MCB) - curve B Type 2 - 40 A miniature circuit breaker (MCB) - curve 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	1.5 hp 120 V AC 3 hp 240 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
, and the second	4 kV AC for input or output to case
filional and advantage with the day	**************************************
[Uimp] rated impulse withstand voltage	6 kV output to case 6 kV input to output
	o kv iriput 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 for input Screw terminals: 0.55.26 mm², (AWG 20AWG 10) with cable end for output Screw terminals: 0.23.3 mm², (AWG 24AWG 12) without cable end for input Screw terminals: 0.58.26 mm², (AWG 20AWG 8) without cable end for output Forked type tag connectors: 9.2 x 4 mm for input Ring lugs: 9.2 x 4 mm for input Forked type tag connectors: 11.7 x 4.5 mm for output Ring lugs: 11.7 x 4.5 mm for output
Thermal resistance	0.3 °C/W junction to case
thermal pad impedance	0.48 °C-in²/W at 25 psi
LED indicator	LED, green for input
IP degree of protection	IP20
Safety reliability data	B10d = 1731395 MTTFd = 1875.9 years
Net weight	89.2 g
device presentation	Complete product
Environment	
Ambient air temperature for operation	-4080 °C
ambient air temperature for storage	-40125 °C
Pollution degree	2
Overvoltage category	III
Product certifications	CSA CE UL EAC
Marking	CE UL CSA EAC

IEC 60950-1 CSA C22.2 No 14-13 IEC 62314 UL 508

Packing Units

Standards

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.8 cm
Package 1 Width	4.8 cm

Package 1 Length	6.5 cm
Package 1 Weight	102 g
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	15 cm
Package 2 Width	15 cm
Package 2 Length	40 cm
Package 2 Weight	3.36 kg

Sustainability Screen 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

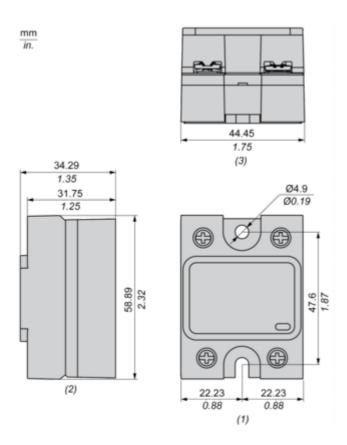
Certifications & Standards

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

18 July 2024

Dimensions Drawings

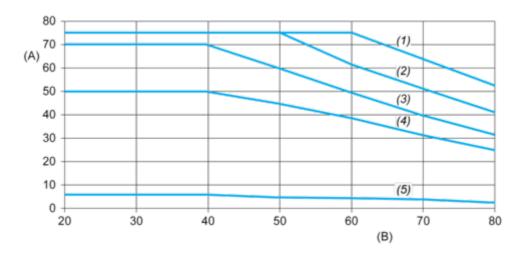
Dimensions



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

Performance Curves

Derating Curves



- A: Load Current (Arms)
- **B**: Ambient Temperature (°C)
- (1) For Heatsink SSRHP02
- (2) For Heatsink SSRHP05
- (3) For Heatsink SSRHP07
- (4) For Heatsink SSRHD10
- (5) No Heatsink