Product datasheet

Specifications

single phase panel, Harmony Solid State Relays, 50A, DIN rail mount, zero voltage switching, input 90...280V AC, output 24...300V AC

SSP1A150M7

⚠ **To be discontinued**

⚠ To be discontinued on: **15 Aug 2024**

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
[In] 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	24...300 V AC
load current	0.15…50 A
Transient overvoltage	600 V
Surge current	625 A for 16.6 ms
Maximum I²t for fusing	1621 A².s for 8.33 ms at 60 Hz 1770 A².s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 40 A miniature circuit breaker (MCB) - curve B Type 2 - 32 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	0.75 hp 120 V AC 2 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 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, (AWG 24...AWG 12) with cable end for input Screw terminals: 0.5...5.26 mm², (AWG 20...AWG 10) with cable end for output Screw terminals: 0.2...3.3 mm², (AWG 24...AWG 12) without cable end for input Screw terminals: 0.5...8.26 mm², (AWG 20...AWG 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	0.45 °C/W junction to case
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	-40…80 °C
ambient air temperature for storage	-40…125 °C
Pollution degree	2
Overvoltage category	III
Product certifications	CSA EAC CE UL
Marking	CSA UL EAC CE
Standards	CSA C22.2 No 14-13 IEC 60950-1 IEC 62314 UL 508

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.8 cm
Package 1 Width	4.7 cm
Package 1 Length	6.6 cm
Package 1 Weight	99.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	30

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Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.277 kg

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 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

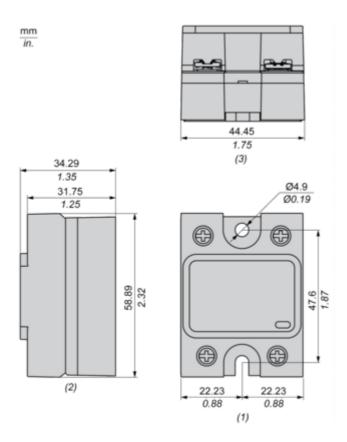✓ Mercury Free

✓ 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

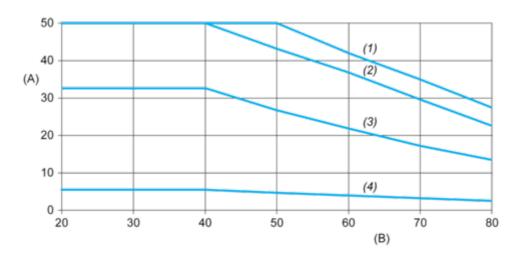**Circularity Profile**   End of Life Information

Dimensions Drawings

Dimensions

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

44.45
1.75
(3)

34.29
1.35
31.75
1.25

58.89
2.32

(2)

Ø4.9
Ø0.19

47.6
1.87

22.23
0.88
22.23
0.88
(1)

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

SSP1A150M7

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

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