Product datasheet

Specifications

Green Premium™

Solid state relay, Harmony, 125A, DIN rail mount, zero voltage switching, input 4â€¦32V DC, output 48â€¦660V AC

SSP1A4125BD

⚠ **Discontinued**

⚠ Discontinued on: 15 Jun 2022

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	125 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	4...32 V DC
Minimum switching voltage	4 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Response time	0.5 cycle (turn-on) 0.5 cycle (turn-off)
Input current	7…12 mA
Output voltage	48...660 V AC
load current	0.15…125 A
Transient overvoltage	1200 V
Surge current	1750 A for 16.6 ms
Maximum I²t for fusing	12709 A².s for 8.33 ms at 60 Hz 13950 A².s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 80 A miniature circuit breaker (MCB) - curve B Type 2 - 63 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	2 hp 120 V AC 5 hp 240 V AC 10 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, (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	0.22 °C/W junction to case
LED indicator	LED, green for input
IP degree of protection	IP20
Safety reliability data	MTTFd = 1875.9 years B10d = 1731395
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	UL CSA CE EAC
Marking	EAC UL CE CSA
Standards	IEC 62314 UL 508 IEC 60950-1 CSA C22.2 No 14-13

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.8 cm
Package 1 Width	4.8 cm
Package 1 Length	6.7 cm
Package 1 Weight	101.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	30

Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.331 kg

Sustainability ![Green Premium]

Green Premium^{TM} 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

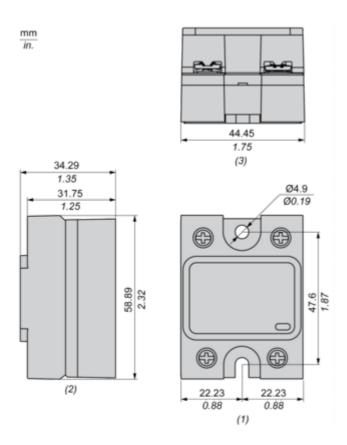✓ Mercury Free

✓ 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

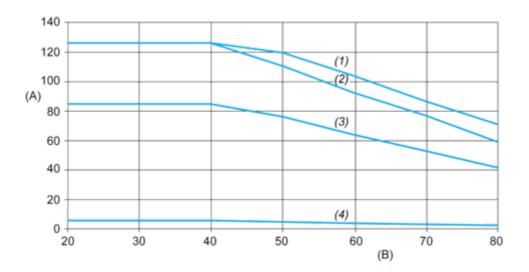**Circularity Profile**   End of Life Information

Dimensions Drawings

Dimensions

(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) No Heatsink