

Product datasheet

Specifications



Harmony. Solid state relay. 50 A.
panel mount.. zero voltage
switching. thermal pad. input 4...
32 V DC. output 48...660 V AC

SSP1A450BDT

Price: 1,590.57 ZAR

Main

Range Of Product	Harmony Solid State Relays
Provided Accessory	Thermal pad
Product Or Component Type	Solid state relay up to 50 A
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

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
Load Current	0.15...50 A
Transient Overvoltage	1200 V
Surge Current	625 A for 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) - 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 5 hp 480 V AC
Insulation Resistance	1000 MOhm at 500 V DC
Maximum Capacitance	8 pF for input/output

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

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

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
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	-40...80 °C
Ambient Air Temperature For Storage	-40...125 °C
Pollution Degree	2
Overvoltage Category	III
Product Certifications	UL CE EAC CSA
Marking	EAC UL CE CSA
Standards	CSA C22.2 No 14-13 UL 508 IEC 60950-1 IEC 62314

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3.800 cm
Package 1 Width	4.800 cm
Package 1 Length	6.500 cm
Package 1 Weight	97.000 g
Unit Type Of Package 2	S01
Number Of Units In Package 2	30
Package 2 Height	15.000 cm

Package 2 Width	15.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	3.250 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-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

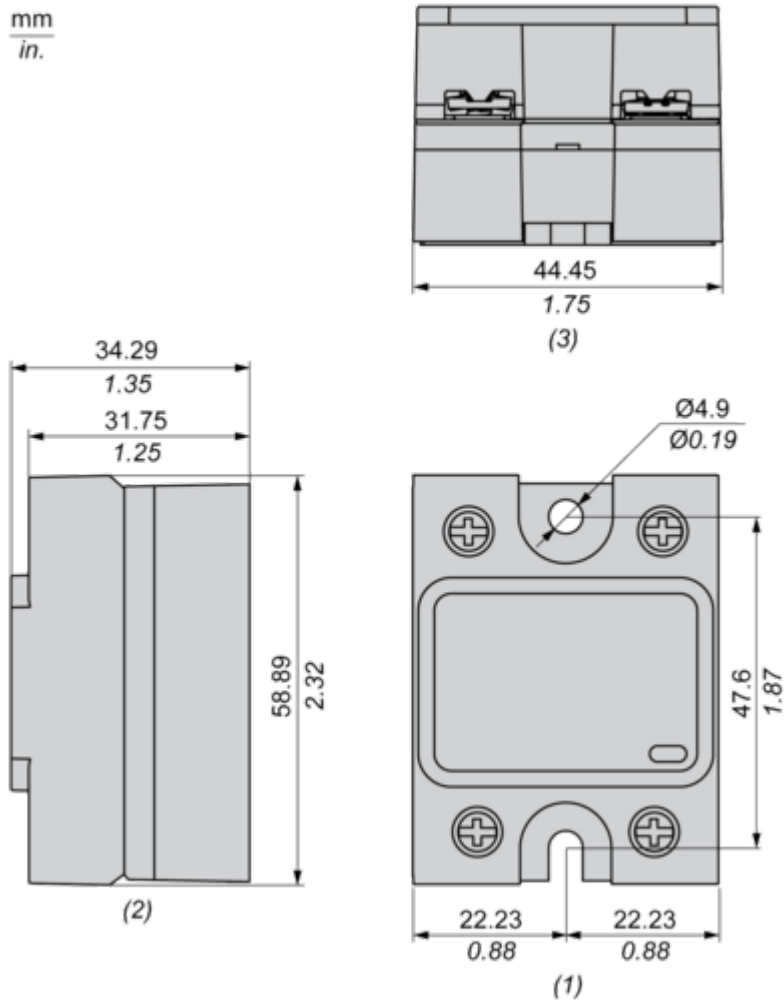
Certifications & Standards

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

Dimensions Drawings

Dimensions

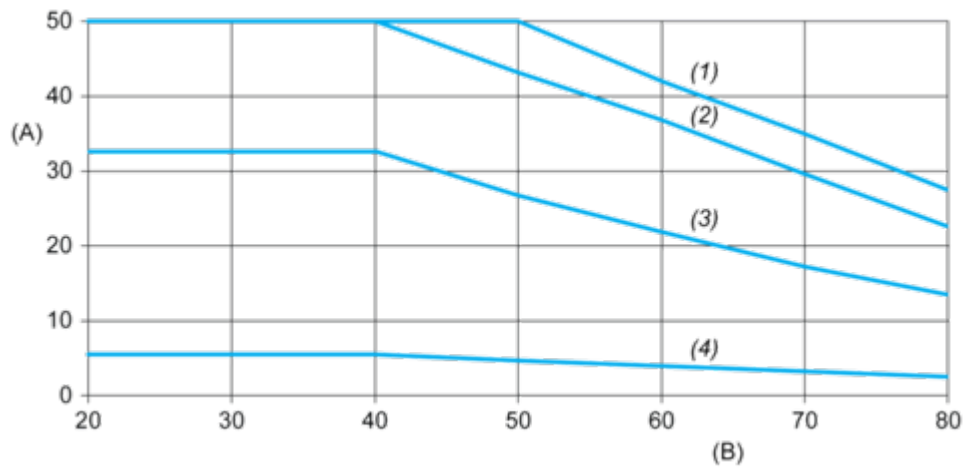
mm
in.



- (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