

SSP1A450BD

solid state relay - panel mounting - input 4-32V DC,
output 48-660 V AC, 50A



Main

Range of product	Zelio Relay
Product or component type	Solid state relay
Device short name	SSP1
Mounting support	Panel
Network number of phases	1 phase
Contacts type and composition	1 NO
[In] rated current	50 A
Solid state output type	Zero voltage switching SCR output

Complementary

Control circuit voltage	4...32 V DC
Switching voltage	>= 4 V DC turn-on <= 1 V DC turn-off
Response time	0.5 cycle turn-on 0.5 cycle turn-off
Input current limits	7...12 mA
Output voltage	48...660 V AC
Load current	0.15...50 A
Absolute maximum voltage	1200 V
Surge current	<= 625 A for 16.6 ms
Maximum I ² t for fusing	1770 A ² .s for 10 ms at 50 Hz half cycle 1629 A ² .s for 8.33 ms at 60 Hz half cycle
Protection device type	Type 1 - 40 A miniature circuit breaker (MCB) - curve B Type 2 - 32 A miniature circuit breaker (MCB) - curve B
Leakage current	<= 1 mA off-state
Voltage drop	1.15 V on-state
DV/dt	500 V/μs off-state at maximum voltage
Cos phi	0.5 with maximum load
Motor power hp	5 hp 480 V AC 0.75 hp 120 V AC 2 hp 240 V AC
Insulation resistance	1000 MOhm at 500 V DC
Capacitance unbalance	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	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 Screw terminals : 0.2...3.3 mm ² , (AWG 24...AWG 12) with cable end for input Screw terminals : 0.5...5.26 mm ² , (AWG 20...AWG 10) with cable end for output Screw terminals : 0.2...3.3 mm ² , (AWG 24...AWG 12) without cable end for input Screw terminals : 0.5...8.26 mm ² , (AWG 20...AWG 8) without cable end for output
Thermal resistance	0.45 °C/W junction to case
Local signalling	LED, green for input

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IP degree of protection	IP20
Safety reliability data	MTTFd = 1875.9 years B10d = 1731395
Product weight	89.2 g

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	CE CSA RoHS UL REACH EAC
marking	CE CSA UL EAC
standards	EN/IEC 60950-1 UL 508 EN/IEC 62314 CSA C22.2 No 14-13

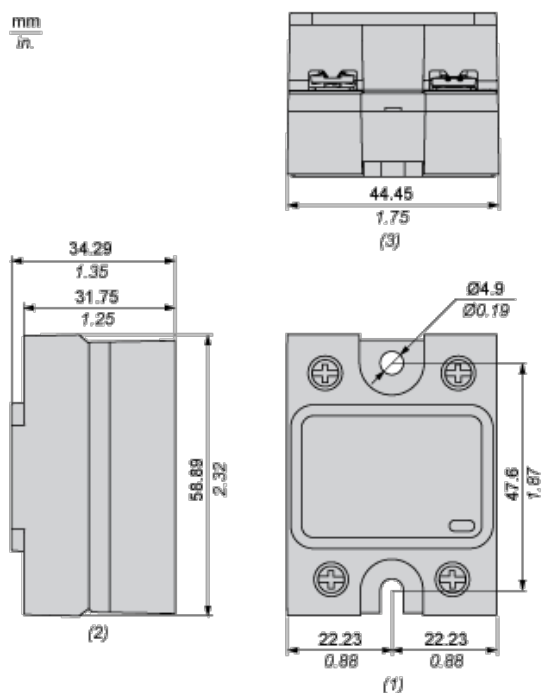
Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1522 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Contractual warranty

Warranty period	18 months
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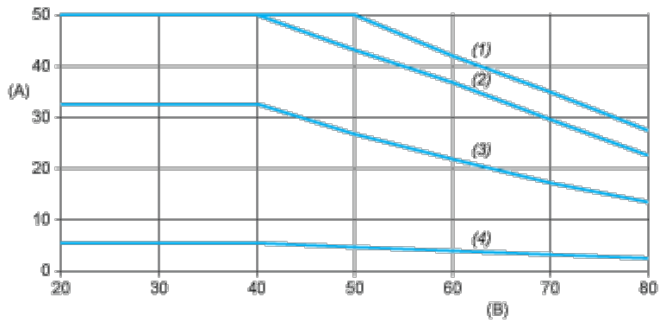
Dimensions



- (1) Front view
(2) Side view

(3) Bottom view

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