

SSP1A450BD

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



Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Device short name	SSP1
Mounting support	Panel
Number of phases	1 phase
Contacts type and configuration	1 NO
Line Rated Current	50 A
Solid state output type	Zero voltage switching SCR output

Complementary

[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...50 A
Transient overvoltage	1200 V
Surge current	625 A 16.6 ms
Maximum I ² t for fusing	1770 A ² .S 10 ms 50 Hz 1629 A ² .s 8.33 ms 60 Hz
Co-ordination type	Type 1 - 40 A miniature circuit breaker (MCB) B Type 2 - 32 A miniature circuit breaker (MCB) 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 500 V DC
Maximum capacitance	8 pF input/output
Dielectric strength	4 KV AC input/output 4 kV AC 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 input 2...2.2 N.m output
Connections - terminals	Screw terminals 0.2...3.3 mm ² , AWG 24...AWG 12) with cable end input Screw terminals 0.5...5.26 mm ² , AWG 20...AWG 10) with cable end output Screw terminals 0.2...3.3 mm ² , AWG 24...AWG 12) without cable end input Screw terminals 0.5...8.26 mm ² , AWG 20...AWG 8) without cable end output Forked type tag connectors 9.2 x 4 mm input Ring lugs 9.2 x 4 mm input Forked type tag connectors 11.7 x 4.5 mm output Ring lugs 11.7 x 4.5 mm output
Thermal resistance	0.45 °C/W junction to case
LED indicator	LED, green input

IP degree of protection	IP20
Safety reliability data	B10d = 1731395 MTTFd = 1875.9 years
Net Weight	3.15 oz (89.2 g)
Device presentation	Complete product

Environment

Ambient air temperature for operation	-40...176 °F (-40...80 °C)
Ambient air temperature for storage	-40...257 °F (-40...125 °C)
Pollution degree	2
Overvoltage category	III
Product certifications	CSA UL RoHS REACH EAC CE
Marking	UL CSA EAC CE
Standards	CSA C22.2 No 14-13 EN/IEC 60950-1 EN/IEC 62314 UL 508

Ordering and shipping details

Category	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	00785901506942
Nbr. of units in pkg.	30
Package weight(Lbs)	0.2 lb(US) (0.09 kg)
Returnability	No
Country of origin	MX

Packing Units

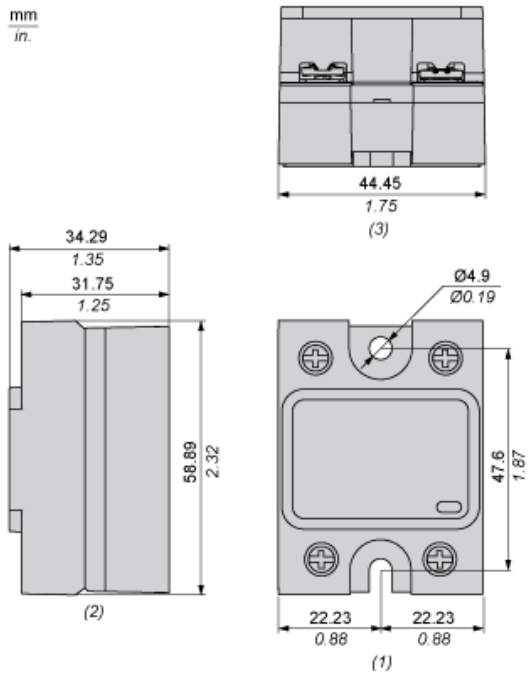
Package 1 Height	0.380 dm
Package 1 width	0.480 dm
Package 1 Length	0.670 dm

Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds which is known to the State of California to cause Carcinogen & Reproductive harm. For more information go to www.p65warnings.ca.gov
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

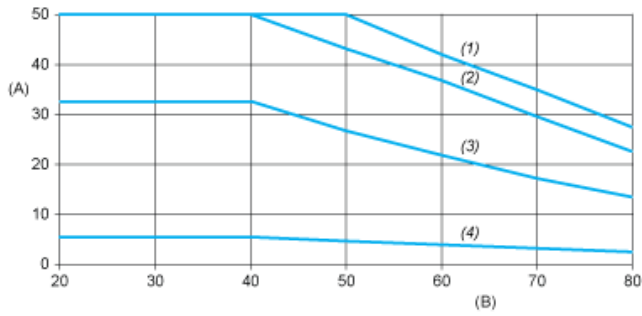
Dimensions

mm
in.



- (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