

SSP1A125BDT

Solid state panel mount relay, 25 A, zero voltage switching, thermal pad, input 3...32 V DC, output 24...300 V AC



Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Provided accessory	Thermal pad
Device short name	SSP1
Mounting support	Panel
Number of phases	1 phase
Contacts type and configuration	1 NO
Line Rated Current	25 A
Solid state output type	SCR output Zero voltage switching

Complementary

[Uc] control circuit voltage	3...32 V DC
Minimum switching voltage	3 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	10 mA 12 V DC
Output voltage	24...300 V AC
Load current	0.15...25 A
Transient overvoltage	600 V
Surge current	250 A for 16.6 ms
Maximum I ² t for fusing	259 A ² .s 8.33 ms 60 Hz 285 A ² .s 10 ms 50 Hz
Co-ordination type	Type 1 - 25 A miniature circuit breaker (MCB) B Type 2 - 20 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	0.5 Hp 120 V AC 1 hp 240 V AC
Insulation resistance	1000 MOhm 500 V DC
Maximum capacitance	10 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	0.8 °C/W junction to case
Thermal pad impedance	0.48 °C-in²/W at 25 psi
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	EAC CE RoHS UL CSA
Marking	UL CE CSA EAC
Standards	UL 508 EN/IEC 60950-1 EN/IEC 62314 CSA C22.2 No 14-13

Ordering and shipping details

Category	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	00785901541424
Nbr. of units in pkg.	1
Package weight(Lbs)	0.21 lb(US) (0.10 kg)
Returnability	Yes
Country of origin	MX

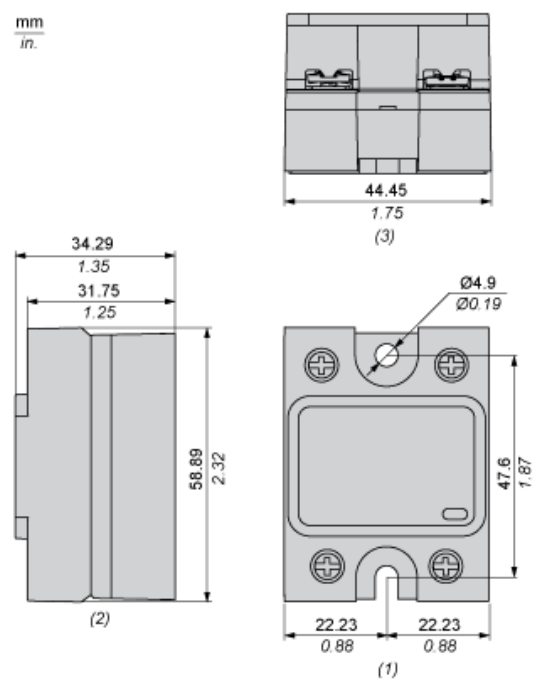
Packing Units

Package 1 Height	0.380 dm
Package 1 width	0.480 dm
Package 1 Length	0.650 dm

Offer Sustainability

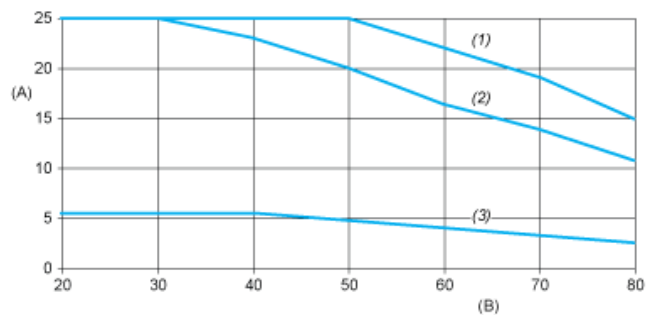
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
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



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

Derating Curves



- A : Load Current (Arms)
B : Ambient Temperature (°C)
(1) For Heatsink SSRHP17
(2) For Heatsink SSRHP25
(3) No Heatsink