

# SSP1A175BDT

Harmony, Solid state relay, 75 A, panel mount, zero voltage switching, thermal pad, input 3...32 V DC, output 24...300 V AC



## Main

Range of product	Harmony Solid State Relays
Product or component type	Solid state relay up to 75 A
Provided accessory	Thermal pad
Device short name	SSP1
Mounting support	Panel
Number of phases	1 phase
Line Rated Current	75 A
Solid state output type	SCR output Zero voltage switching
Output switching mode	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 at 12 V DC
Output voltage	24...300 V AC
Load current	0.15...75 A
Transient overvoltage	600 V
Surge current	1000 A 16.6 ms
Maximum I <sup>2</sup> t for fusing	4150 A <sup>2</sup> .S for 8.33 ms at 60 Hz 4555 A <sup>2</sup> .s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 50 A miniature circuit breaker (MCB) B Type 2 - 40 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	1.5 Hp 120 V AC 3 hp 240 V AC
Insulation resistance	1000 MOhm at 500 V DC
Maximum capacitance	10 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 mm <sup>2</sup> , AWG 24...AWG 12) with cable end input Screw terminals 0.5...5.26 mm <sup>2</sup> , AWG 20...AWG 10) with cable end output Screw terminals 0.2...3.3 mm <sup>2</sup> , AWG 24...AWG 12) without cable end input Screw terminals 0.5...8.26 mm <sup>2</sup> , 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	0.3 °C/W junction to case

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Thermal pad impedance	0.48 °C-in <sup>2</sup> /W at 25 psi
LED indicator	LED, green input
IP degree of protection	IP20
Safety reliability data	MTTFd = 1875.9 years B10d = 1731395
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 EAC CE UL
Marking	CE CSA UL EAC
Standards	CSA C22.2 No 14-13 EN/IEC 62314 EN/IEC 60950-1 UL 508

## Ordering and shipping details

Category	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	00785901397106
Nbr. of units in pkg.	30
Package weight(Lbs)	30 lb(US) (13.61 kg)
Returnability	No
Country of origin	MX

## Packing Units

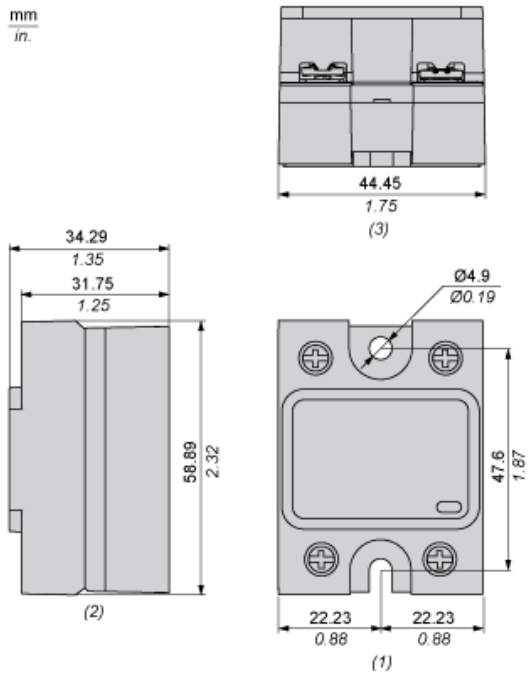
Package 1 Height	0.380 dm
Package 1 width	0.480 dm
Package 1 Length	0.650 dm

## 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

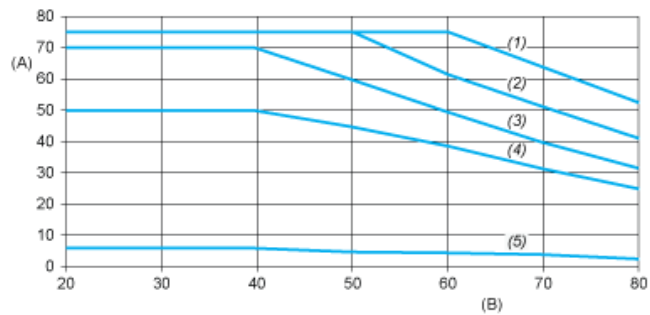
Dimensions

mm  
in.



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

Derating Curves



- A : Load Current (Arms)  
B : Ambient Temperature (°C)  
(1) For Heatsink SSRHP02  
(2) For Heatsink SSRHP05  
(3) For Heatsink SSRHP07  
(4) For Heatsink SSRHD10  
(5) No Heatsink