

# SSP1D412BDT

single phase relay, Harmony Solid State Relays, 12A, panel mount, DC switching, thermal pad, input 3.5 to 32V DC, output 1 to 150V DC



## Main

Range of Product	Harmony Solid State Relays
Product or Component Type	Solid state relay up to 20 A
Provided accessory	Thermal pad
Device short name	SSP1
Mounting Support	Panel
Number of phases	1 phase
Line Rated Current	12 A
Solid state output type	DC switching Mosfet output
Output switching mode	DC switching

## Complementary

[Uc] control circuit voltage	3.5...32 V DC
Minimum switching voltage	3.5 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Response time	0.1 ms (turn-on) 0.1 ms (turn-off)
Input current	10...15 mA
Output voltage	1...150 V DC
Load current	0.001...12 A
Surge current	31 A 10 ms
Co-ordination type	Type 1 - 10 A miniature circuit breaker (MCB) B Type 2 - 6 A miniature circuit breaker (MCB) B
Maximum leakage current	0.3 mA off-state
Maximum voltage drop	<2.8 V on-state
Insulation resistance	1000 MOhm at 500 V DC
Maximum capacitance	50 pF for input/output
Dielectric strength	2.5 KV AC for input/output 2.5 kV AC for input or output to case
[Uimp] rated impulse withstand voltage	2.5 kV output to case
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	0.71 °C/W junction to case
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

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.

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	CE[RETURN]UL[RETURN]EAC[RETURN]CSA
Marking	CE UL EAC CSA
Standards	IEC 62314 UL 508 IEC 60950-1 CSA C22.2 No 14-13

## Ordering and shipping details

Category	22375-INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3606485442006
Returnability	Yes
Country of origin	MX

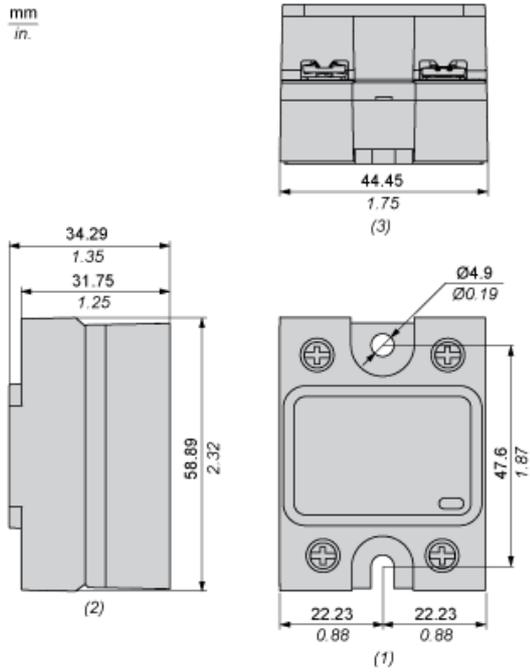
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.50 in (3.8 cm)
Package 1 Width	1.89 in (4.8 cm)
Package 1 Length	2.56 in (6.5 cm)
Package 1 Weight	3.35 oz (95.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	5.91 in (15.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	6.97 lb(US) (3.162 kg)

## Offer Sustainability

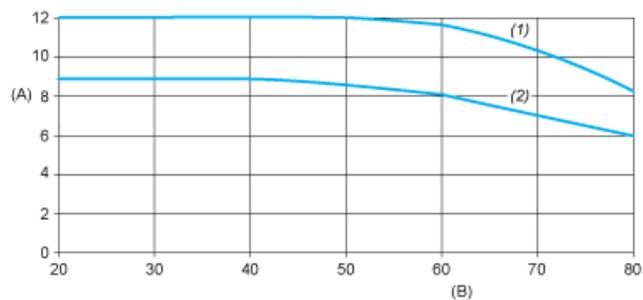
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

Dimensions



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

Derating Curves



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