Product data sheet

Specification





single phase relay, Harmony Solid State Relays, 125A, panel mount, zero voltage switching, thermal pad, input 4 to 32V DC, output 48 to 660V AC

SSP1A4125BDT

Product availability: Stock - Normally stocked in distribution facility

Price*: 103.75 USD

Main

Range of Product	Harmony Solid State Relays
Provided accessory	Thermal pad
Product or Component Type	Panel mount relay
Device short name	SSP1
Mounting Support	Panel
Number of phases	1 phase
Line Rated Current	125 A
solid state output type	Zero voltage switching SCR output
Output switching mode	Zero voltage switching

Complementary

test button	Without test button
[Uc] control circuit voltage	432 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	712 mA
Output voltage	48660 V AC
load current	0.15125 A
Transient overvoltage	1200 V
Surge current	1750 A 16.6 ms
Maximum I ² t for fusing	12709 A².s for 8.33 ms at 60 Hz 13950 A².s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 80 A miniature circuit breaker (MCB) B Type 2 - 63 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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Power factor	0.5 (with maximum load)
Motor controller rating	2 hp 120 V AC 5 hp 240 V AC 10 hp 480 V AC
Insulation resistance	1000 MOhm at 500 V DC
Maximum capacitance	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	1.51.7 N.m for input 22.2 N.m for output
Connections - terminals	Screw terminals 0.23.3 mm², AWG 24AWG 12) with cable end input Screw terminals 0.55.26 mm², AWG 20AWG 10) with cable end output Screw terminals 0.23.3 mm², AWG 24AWG 12) without cable end input Screw terminals 0.58.26 mm², AWG 20AWG 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	0.22 °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	MTTFd = 1875.9 years B10d = 1731395
Net Weight	3.1 oz (89.2 g)
device presentation	Complete product

Environment

Ambient Air Temperature for Operation	-40.0000000000176.0000000000 °F (-4080 °C)
Ambient Air Temperature for Storage	-40.0000000000257.00000000000 °F (-40125 °C)
Pollution degree	2
Overvoltage category	III
Product Certifications	CSA CE UL EAC
Marking	CSA UL CE EAC
Standards	IEC 60950-1 IEC 62314 CSA C22.2 No 14-13 UL 508

Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
GTIN	3606485442105
Returnability	Yes

Country of origin US

Packing Units

•	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.496 in (3.800 cm)
Package 1 Width	1.890 in (4.800 cm)
Package 1 Length	2.559 in (6.500 cm)
Package 1 Weight	3.598 oz (102.000 g)
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	5.906 in (15.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	7.275 lb(US) (3.300 kg)

Sustainability Green Premium

Green PremiumTM **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance



Mercury Free



Rohs Exemption Information

Yes

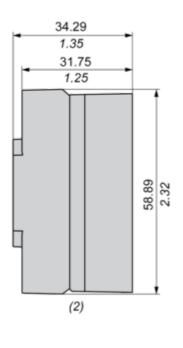
Certifications & Standards

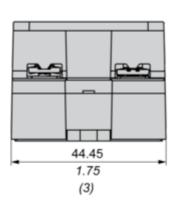
REACh Declaration
Pro-active compliance (Product out of EU RoHS legal scope)
China RoHS declaration
Product Environmental Profile
End of Life Information
WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

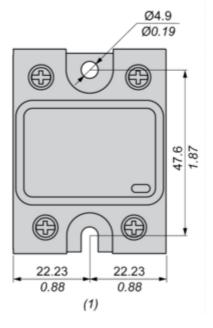
Dimensions Drawings

Dimensions

 $\frac{\text{mm}}{in.}$



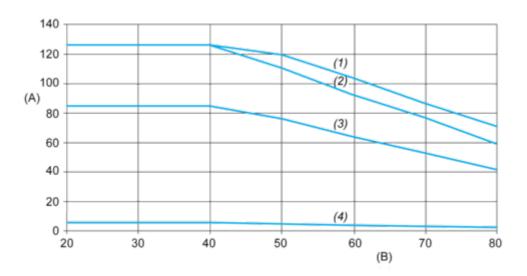




- (1) Front view
- (2) Side view
- (3) Bottom view

Performance Curves

Derating Curves



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