Product data sheet

Specifications





Solid state relay, Harmony, 125A, DIN rail mount, zero voltage switching, input 4…32V DC, output 48…660V AC

SSP1A4125BD



(!) Discontinued on: Jun 30, 2023

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range Of Product	Harmony Solid State Relays	
Product Or Component Type	Solid state relay up to 125 A	
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

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
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
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

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

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	6 kV output to case
Voltage	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
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	-40176 °F (-4080 °C)
Ambient Air Temperature For Storage	-40257 °F (-40125 °C)
Pollution Degree	2
Overvoltage Category	III
Product Certifications	UL CSA CE EAC
Marking	EAC UL CE CSA
Standards	EN/IEC 62314 UL 508 EN/IEC 60950-1 CSA C22.2 No 14-13

Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
Gtin	3606485441917
Returnability	Yes
Country Of Origin	US

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

Package 1 Height	1.50 in (3.8 cm)
Package 1 Width	1.89 in (4.8 cm)
Package 1 Length	2.64 in (6.7 cm)
Package 1 Weight	3.56 oz (101.0 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	7.34 lb(US) (3.331 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

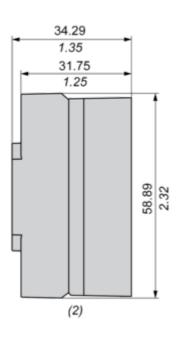
Certifications & Standards

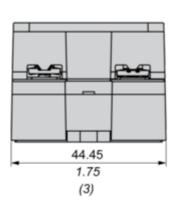
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
California Proposition 65	WARNING: This product 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

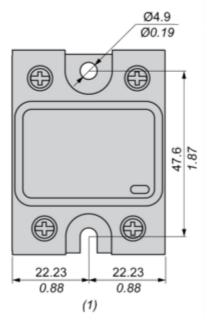
Dimensions Drawings

Dimensions

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



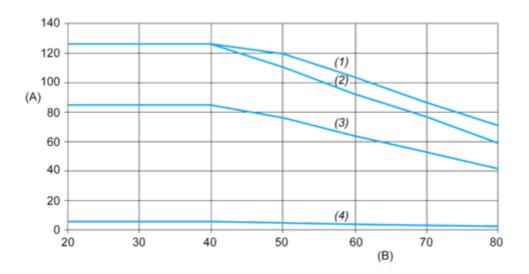




- (1) Front view
- (2) Side view
- (3) Bottom view

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