

three phase relay, Harmony Solid State Relays, 50A, panel mount, zero voltage switching, thermal pad, input 4 to 32V DC, output 42 to 660V AC

SSP3A250BDT

Product availability: Stock - Normally stocked in distribution facility

### Main

Range of Product	Harmony Solid State Relays	
	Turnony condicate Notayo	
Provided accessory	Thermal pad	
Product or Component Type	Panel mount relay	
Device short name	SSP	
Mounting Support	Panel	
Number of phases	3 phase	
Line Rated Current	50 A	
Solid state output type	Zero voltage switching	
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	8.33 ms (turn-on) 8.33 ms (turn-off)	
Input current	1535 mA	
Output voltage	42660 V AC	
Load current	0.450 A	
Transient overvoltage	1200 V	
Surge current	715 A 20 ms 750 A 16.6 ms	
Maximum I <sup>2</sup> t for fusing	2520 A <sup>2</sup> .s for 10 ms at 50 Hz 2320 A <sup>2</sup> .s for 8.3 ms at 60 Hz	
Co-ordination type	TVS	
Maximum leakage current	3 mA off-state	
Maximum voltage drop	<1.6 V on-state	
DV/dt	500 V/μs off-state at maximum voltage	
Power factor	0.5 (with maximum load)	

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

Motor controller rating	1.5 hp 104 °F (40 °C) 120 V AC 3 hp 104 °F (40 °C) 240 V AC 7.5 hp 104 °F (40 °C) 480 V AC 10 hp 104 °F (40 °C) 600 V AC	
Motor power kW	1.1 kW 104 °F (40 °C) 120 V AC 2.2 kW 104 °F (40 °C) 240 V AC 5.5 kW 104 °F (40 °C) 480 V AC 7.5 kW 104 °F (40 °C) 600 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	0.8 kV for input to case 6 kV for input/output circuit 6 kV for input/output to case	
Tightening torque	1.2 N.m for input 2.5 N.m for output	
Connections - terminals	Screw terminals 1 x 0.21 x 2.5 mm², AWG 24AWG 14) input Screw terminals 1 x 1.51 x 10 mm², AWG 16AWG 8) output	
Thermal resistance	0.15 °C/W	
LED indicator	LED, green input	
IP degree of protection	IP20	
Electromagnetic compatibility	Electrostatic discharge 4 kV criteria B contact discharge conforming to IEC 61000-4-2 Electrostatic discharge 8 kV criteria B air discharge conforming to IEC 61000-4-2 Conducted RF disturbances 10 V, 0.1580 MHz criteria A conforming to IEC 61000-4-6 Radiated radio-frequency electromagnetic field immunity test 10 V/m, 80 MHz1 GHz criteria A conforming to IEC 61000-4-3 Surge immunity test 1 kV criteria B output ports line to line conforming to IEC 61000-4-5 Surge immunity test 2 kV criteria B output ports line to earth conforming to IEC 61000-4-5 Surge immunity test 1 kV criteria B input ports line to earth conforming to IEC 61000-4-5 Electrical fast transient/burst immunity test 2 kV, 5kHz criteria B output ports conforming to IEC 61000-4-4 Immunity to voltage dips 0 %/20 ms criteria B conforming to IEC 61000-4-11 Immunity to voltage dips 70 %/500 ms criteria C conforming to IEC 61000-4-11 Immunity to short interruption 0 %/5 s criteria C conforming to IEC 61000-4-11 Electrical fast transient/burst immunity test 1 kV, 5kHz criteria B input ports conforming to IEC 61000-4-1 Electrical fast transient/burst immunity test 1 kV, 5kHz criteria B input ports conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immunity test 3 V/m, 1.46 GHz criteria A conforming to IEC 61000-4-3 Radiated emission 301000 Mhz environment A conforming to IEC 60947-1 Conducted emission 0.1530 Mhz environment A conforming to IEC 60947-1	
Net Weight	0.82 lb(US) (0.37 kg)	
Width	4.09 in (104 mm)	
Height	2.9 in (74.6 mm)	
Depth	1.6 in (41 mm)	
Device presentation	Complete product	
Environment		
Flame retardance	V0 conforming to UL 94	
ambient air temperature for operation	-40176 °F (-4080 °C)	
Ambient Air Temperature for Storage	-40257 °F (-40125 °C)	

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pollution degree

Overvoltage category	III	
Product Certifications	CE	
	CSA	
	EAC	
	UL	
	UKCA	
Marking	CE	
Standards	IEC/EN 62314	
	IEC/EN 60947-4-2	
	IEC/EN 60947-4-3	
	UL 60947-4-2	
	C22.2 No. 14	

# Ordering and shipping details

Category	US10CP222375	
Discount Schedule	0CP2	
GTIN	3606480580024	
Returnability	Yes	
Country of origin	MT	

# **Packing Units**

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	1.77 in (4.500 cm)	
Package 1 Width	3.19 in (8.100 cm)	
Package 1 Length	4.57 in (11.600 cm)	
Package 1 Weight	13.404 oz (380.000 g)	
Unit Type of Package 2	S02	
Number of Units in Package 2	24	
Package 2 Height	5.91 in (15.000 cm)	
Package 2 Width	11.81 in (30.000 cm)	
Package 2 Length	15.75 in (40.000 cm)	
Package 2 Weight	21.094 lb(US) (9.568 kg)	



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

<b>⊘</b> Environmental footprint		
Carbon footprint (kg CO2 eq, Total Life cycle)	5140	

#### **Use Better**

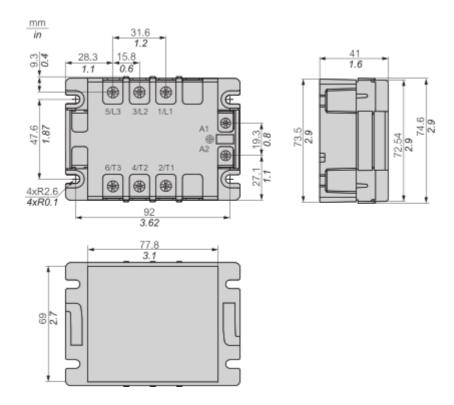
Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which 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

### **Use Again**

○ Repack and remanufacture	
Take-back	No

## **Dimensions Drawings**

### **Dimensions**

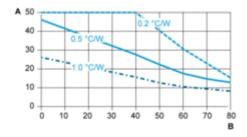


# **Product data sheet**

## SSP3A250BDT

### Performance Curves

## **Derating Curves**



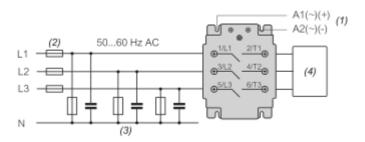
A : Load Current (Amperes)
B : Ambient Temperature (°C)

# **Product data sheet**

### SSP3A250BDT

### Connections and Schema

### Wiring



- (1) Setting control voltage in between turn on and turn off voltage may cause malfunction or damage the SSR.
- (2) Recommended fuses.
- (3) Recommended to install filters if Conductive Emission (CE) Class A is required.
- (4) Load.

### **Technical Illustration**

### **Dimensions**

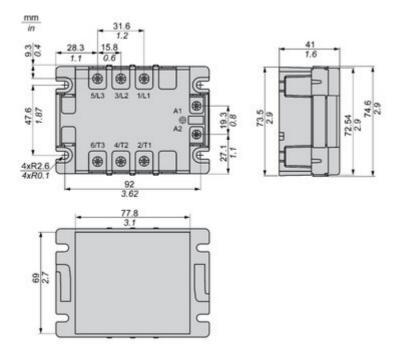


Image of product / Alternate images

**Alternative** 













Image of product in real life situation

