

# Product data sheet

Specifications



three phase relay, Harmony Solid State Relays, 50A, panel mount, zero voltage switching, thermal pad, input 90...280V AC, output 42...660V AC

SSP3A250P7T

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

## Main

Range of Product	Harmony Solid State Relays
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	90...280 V AC 50/60 Hz
Minimum switching voltage	90 V AC turn-on
Maximum switching voltage	9 V AC turn-off
Response time	20 ms (turn-on) 30 ms (turn-off)
Input current	7...20 mA
Output voltage	42...660 V AC
Load current	0.4...50 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.

<b>Motor controller rating</b>	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
<b>Motor power kW</b>	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
<b>Insulation resistance</b>	>= 1000 MOhm at 500 V DC
<b>Maximum capacitance</b>	8 pF for input/output
<b>Dielectric strength</b>	4 kV AC for input/output 4 kV AC for input or output to case
<b>[Uimp] rated impulse withstand voltage</b>	4 kV for input to case 6 kV for input/output circuit 6 kV for input/output to case
<b>Tightening torque</b>	1.2 N.m for input 2.5 N.m for output
<b>Connections - terminals</b>	Screw terminals 1 x 0.2...1 x 2.5 mm <sup>2</sup> , AWG 24...AWG 14) input Screw terminals 1 x 1.5...1 x 10 mm <sup>2</sup> , AWG 16...AWG 8) output
<b>Thermal resistance</b>	0.15 °C/W
<b>LED indicator</b>	LED, green input
<b>IP degree of protection</b>	IP20
<b>Electromagnetic compatibility</b>	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, 0.15...80 MHz criteria A conforming to IEC 61000-4-6 Radiated radio-frequency electromagnetic field immunity test 10 V/m, 80 MHz...1 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 40 %/200 ms criteria C 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 61000-4-4 Radiated radio-frequency electromagnetic field immunity test 3 V/m, 1.4...6 GHz criteria A conforming to IEC 61000-4-3 Radiated emission 30...1000 Mhz environment A conforming to IEC 60947-1 Conducted emission 0.15...30 Mhz environment A conforming to IEC 60947-1 Radiated emission conforming to IEC 60947-1 Conducted emission conforming to IEC 60947-1
<b>Net Weight</b>	0.82 lb(US) (0.37 kg)
<b>Width</b>	4.09 in (104 mm)
<b>Height</b>	2.9 in (74.6 mm)
<b>Depth</b>	1.6 in (41 mm)
<b>Device presentation</b>	Complete product

## Environment

<b>Flame retardance</b>	V0 conforming to UL 94
<b>Ambient Air Temperature for Operation</b>	-40...176 °F (-40...80 °C)
<b>Ambient Air Temperature for Storage</b>	-40...257 °F (-40...125 °C)

Pollution degree	2
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	3606480580000
Returnability	No
Country of origin	MX

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.57 in (4.000 cm)
Package 1 Width	3.35 in (8.500 cm)
Package 1 Length	4.72 in (12.000 cm)
Package 1 Weight	9.912 oz (281.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	27
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	17.163 lb(US) (7.785 kg)

## Sustainability

**Green Premium™** label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> 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 >](#)


[How we assess product sustainability >](#)

## Resource performance


 Take-Back No

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## Well-being performance

 Lead Free

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 Rohs Exemption Information Yes

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**Reach Regulation** [REACH Declaration](#)

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**Eu Rohs Directive** Pro-active compliance (Product out of EU RoHS legal scope)

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**China Rohs Regulation** [China RoHS declaration](#)

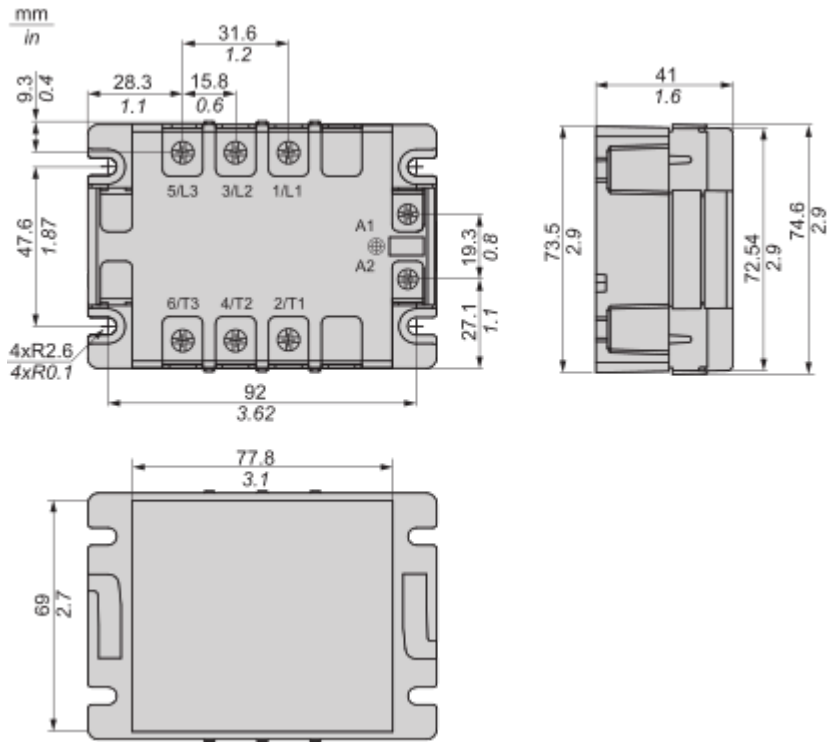
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**California Proposition 65** WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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Dimensions Drawings

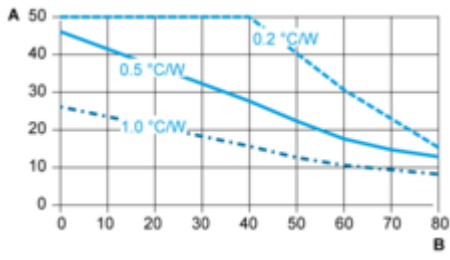
Dimensions



Performance Curves

Derating Curves

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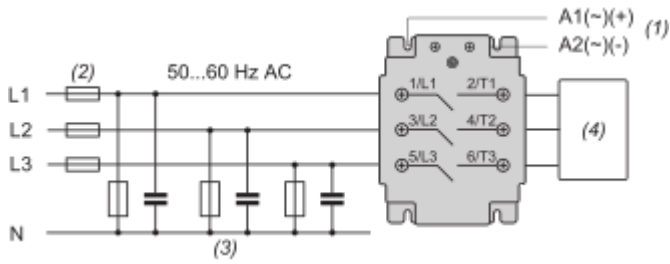
A : Load Current (Amperes)

B : Ambient Temperature (°C)

Connections and Schema

Wiring

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- (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

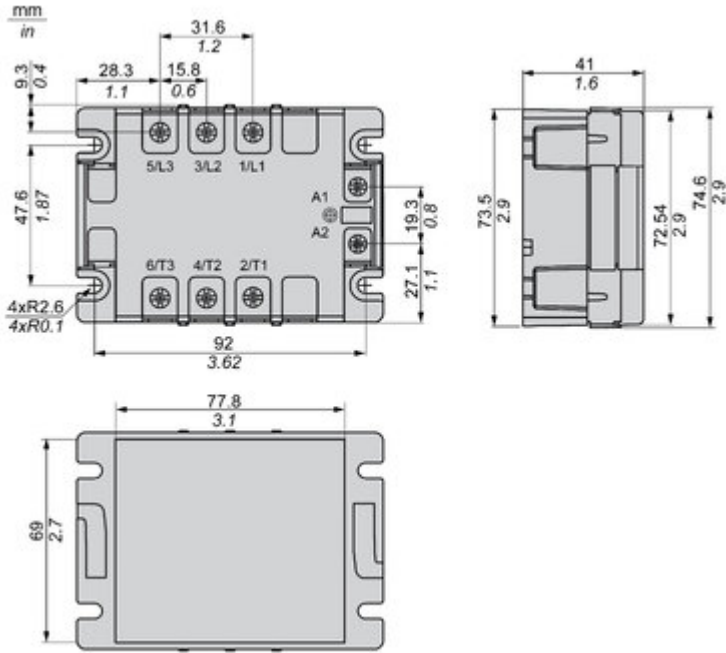




Image of product / Alternate images

Alternative

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