

# Product data sheet

Specifications



single phase panel, Harmony Solid State Relays, 90A, panel mount, zero voltage switching, thermal pad, input 4...32V DC, output 48...660V AC

SSP1A490BDT

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

Price\*: 82.13 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	90 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	4...32 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	7...12 mA
Output voltage	48...660 V AC
load current	0.15...90 A
Transient overvoltage	1200 V
Surge current	1200 A 16.6 ms
Maximum I²t for fusing	5976 A².s for 8.33 ms at 60 Hz 6560 A².s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 63 A miniature circuit breaker (MCB) B Type 2 - 50 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	1.5 hp 120 V AC 3 hp 240 V AC 7.5 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	1.5...1.7 N.m for input 2...2.2 N.m for output
Connections - terminals	Screw terminals 0.2...3.3 mm², AWG 24...AWG 12) with cable end input Screw terminals 0.5...5.26 mm², AWG 20...AWG 10) with cable end output Screw terminals 0.2...3.3 mm², AWG 24...AWG 12) without cable end input Screw terminals 0.5...8.26 mm², 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	0.27 °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	-40.0000000000...176.0000000000 °F (-40...80 °C)
Ambient Air Temperature for Storage	-40.0000000000...257.0000000000 °F (-40...125 °C)
Pollution degree	2
Overvoltage category	III
Product Certifications	UL CSA CE EAC
Marking	EAC UL CE CSA
Standards	CSA C22.2 No 14-13 IEC 60950-1 UL 508 IEC 62314

## Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
GTIN	3606485442099
Returnability	Yes

Country of origin	MX
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## 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	3.527 oz (100.000 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	7.496 lb(US) (3.400 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 >](#)

[Guide to assess a product’s sustainability >](#)



Transparency   RoHS/REACH

Well-being performance

 Mercury Free

 RoHS Exemption Information   [Yes](#)

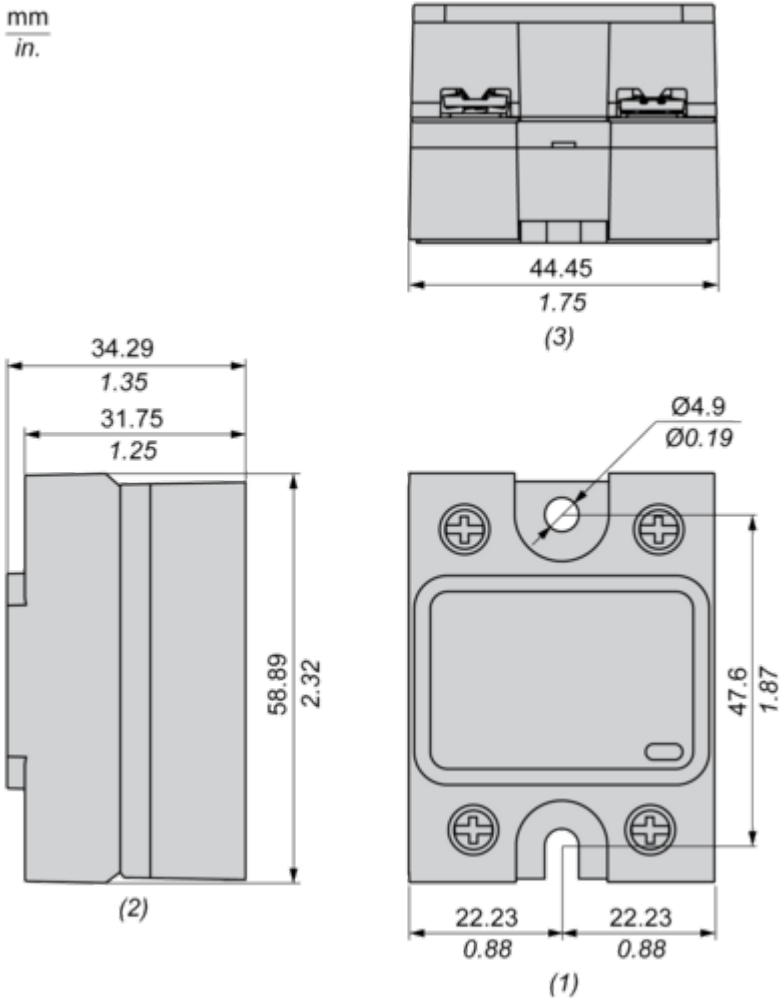
Certifications & Standards

Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
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="#">www.P65Warnings.ca.gov</a>

Dimensions Drawings

Dimensions

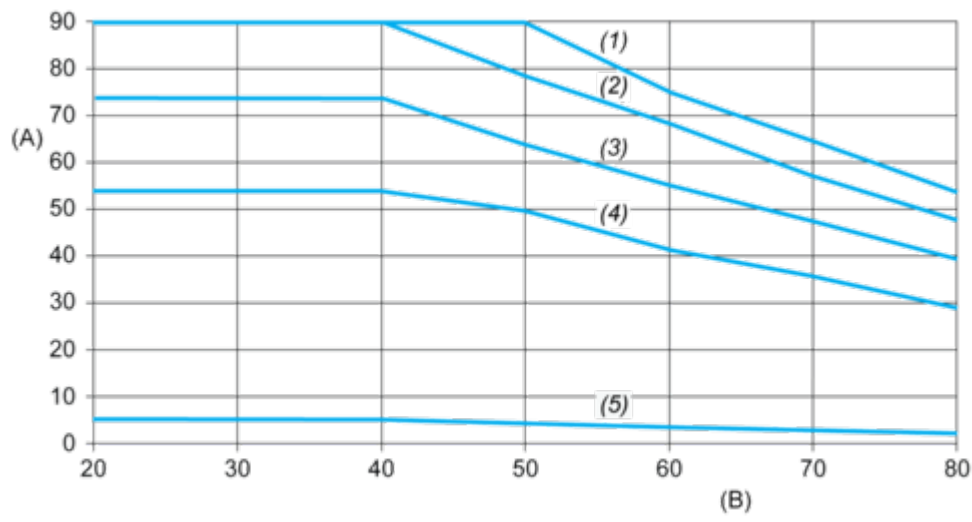
mm  
in.



- (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) For Heatsink SSRHD10  
(5) No Heatsink