

Product datasheet

Specifications



Harmony. Solid state relay. 90 A. panel mount. zero voltage switching. thermal pad. input 4...32 V DC. output 48...660 V AC

SSP1A490BDT

Price: 2,057.97 ZAR

Main

Range Of Product	Harmony Solid State Relays
Provided Accessory	Thermal pad
Product Or Component Type	Solid state relay up to 125 A
Device Short Name	SSP1
Mounting Support	Panel
Number Of Phases	1 phase
[In] Rated Current	90 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	7...12 mA
Load Current	0.15...90 A
Transient Overvoltage	1200 V
Surge Current	1200 A for 16.6 ms
Maximum I ² T For Fusing	5976 A ² .s for 8.33 ms at 60 Hz 6560 A ² .s for 10 ms at 50 Hz
Co-Ordination Type	Type 1 - 63 A miniature circuit breaker (MCB) - curve B Type 2 - 50 A miniature circuit breaker (MCB) - curve B
Maximum Leakage Current	1 mA off-state
Maximum Voltage Drop	<1.15 V on-state
Dv/Dt	500 V/ μ s off-state at maximum voltage
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

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

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 mm ² , (AWG 24...AWG 12) with cable end for input Screw terminals: 0.5...5.26 mm ² , (AWG 20...AWG 10) with cable end for output Screw terminals: 0.2...3.3 mm ² , (AWG 24...AWG 12) without cable end for input Screw terminals: 0.5...8.26 mm ² , (AWG 20...AWG 8) without cable end for output Forked type tag connectors: 9.2 x 4 mm for input Ring lugs: 9.2 x 4 mm for input Forked type tag connectors: 11.7 x 4.5 mm for output Ring lugs: 11.7 x 4.5 mm for output
Thermal Resistance	0.27 °C/W junction to case
Thermal Pad Impedance	0.48 °C-in ² /W at 25 psi
Led Indicator	LED, green for input
Ip Degree Of Protection	IP20
Safety Reliability Data	MTTFd = 1875.9 years B10d = 1731395
Net Weight	89.2 g
Device Presentation	Complete product

Environment

Ambient Air Temperature For Operation	-40...80 °C
Ambient Air Temperature For Storage	-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

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3.800 cm
Package 1 Width	4.800 cm
Package 1 Length	6.500 cm
Package 1 Weight	100.000 g
Unit Type Of Package 2	S01
Number Of Units In Package 2	30
Package 2 Height	15.000 cm

Package 2 Width 15.000 cm

Package 2 Length 40.000 cm

Package 2 Weight 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-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](#)

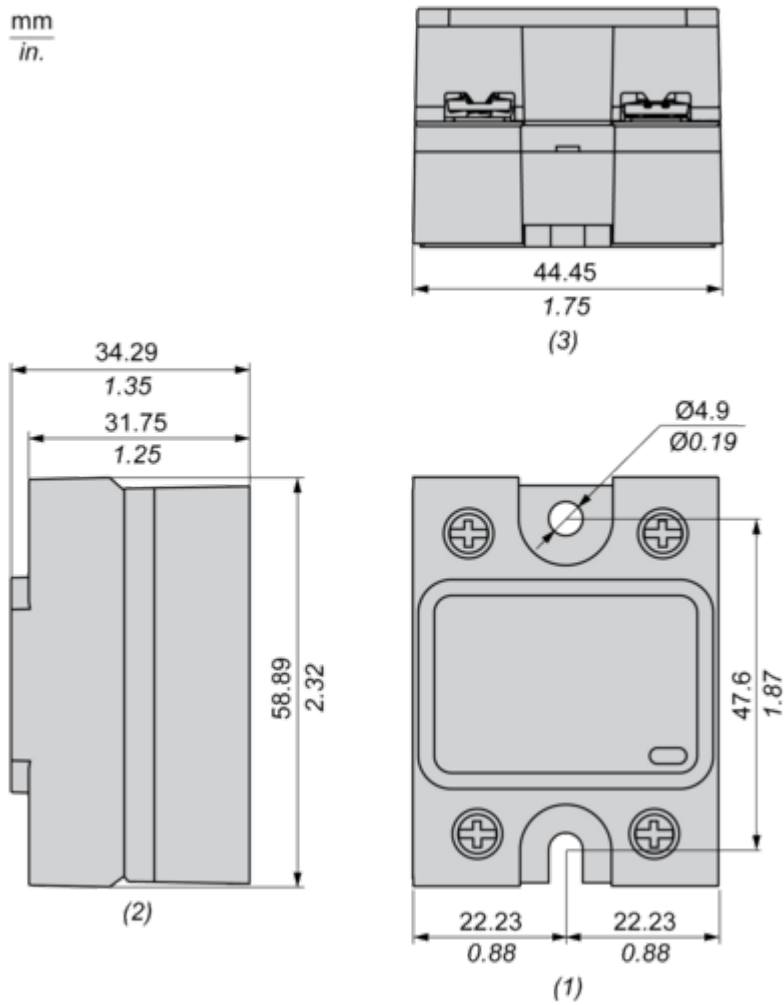
Environmental Disclosure [Product Environmental Profile](#)

Circularity Profile [End of Life Information](#)

Dimensions Drawings

Dimensions

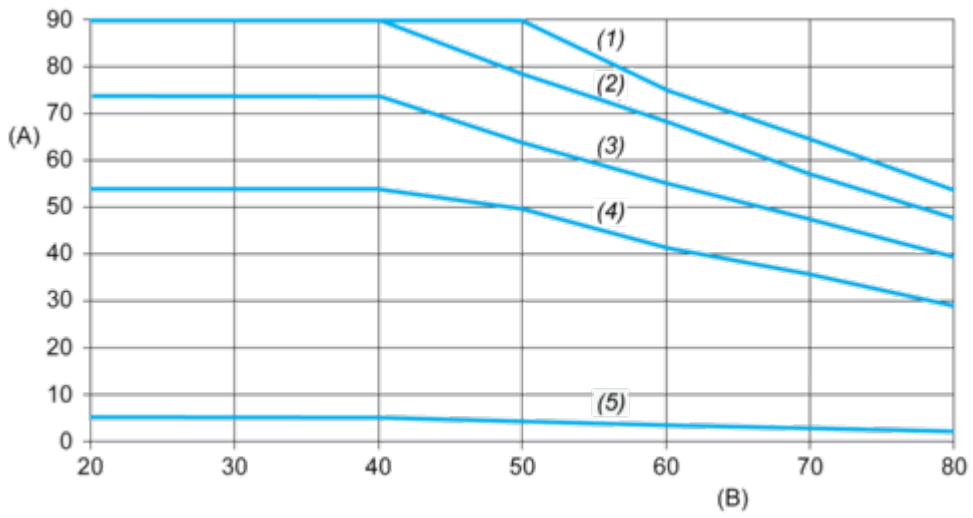
mm
in.



- (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