

Product datasheet

Specifications



Solid state relay, Harmony, 125A,
panel mount, zero voltage switching,
input 90â€¦280V AC, output
48â€¦660V AC

SSP1A4125M7

⚠ Discontinued on: 15 Jun 2023

⚠ Discontinued

Main

Range of product	Harmony Solid State Relays
Product or component type	Panel mount relay
Device short name	SSP1
Mounting support	Panel
Number of phases	1 phase
[In] rated current	125 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	90...280 V AC
Minimum switching voltage	90 V AC turn-on
Maximum switching voltage	10 V AC turn-off
Response time	30 ms (turn-off) 25 ms (turn-on)
Input current	5...10 mA
Output voltage	48...660 V AC
Load current	0.15...125 A
Transient overvoltage	1200 V
Surge current	1750 A for 16.6 ms
Maximum I ² t for fusing	12709 A ² .s for 8.33 ms at 60 Hz 13950 A ² .s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 80 A miniature circuit breaker (MCB) - curve B Type 2 - 63 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/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
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 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	0.22 °C/W junction to case
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	EAC CE CSA UL
Marking	UL CE EAC CSA
Standards	IEC 60950-1 IEC 62314 UL 508 CSA C22.2 No 14-13

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.8 cm
Package 1 Width	4.8 cm
Package 1 Length	6.7 cm
Package 1 Weight	103.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	30

Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.382 kg

Contractual warranty

Warranty (in months)	18
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Environmental Data

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 >](#)



Environmental footprint

[Environmental Disclosure](#)

[Product Environmental Profile](#)

Use Better



Materials and Substances

Packaging made with recycled cardboard

Yes

Packaging without single use plastic

Yes

SCIP Number

134201bc-d293-4667-9cca-10a7f11729e0

EU RoHS Directive

[Compliant By Exemption](#)

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

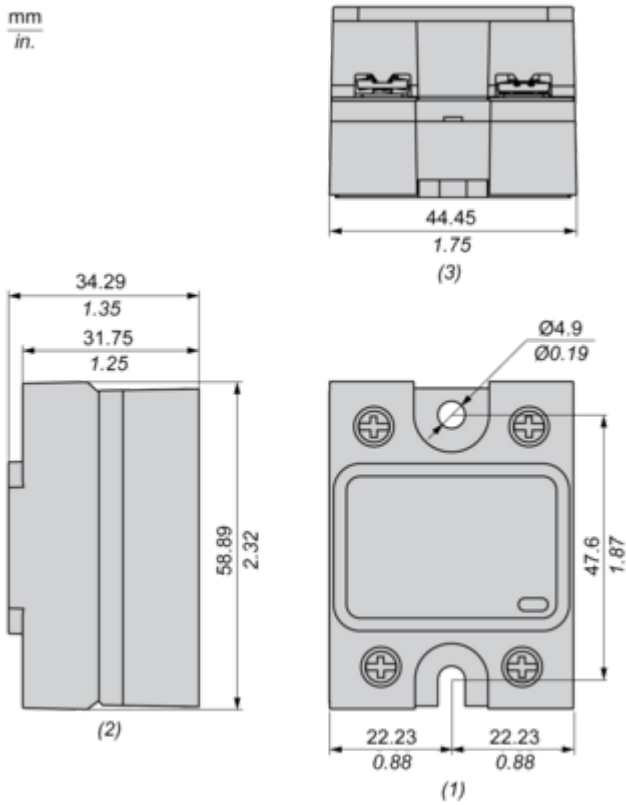
End of life manual availability

[End of Life Information](#)

Dimensions Drawings

Dimensions

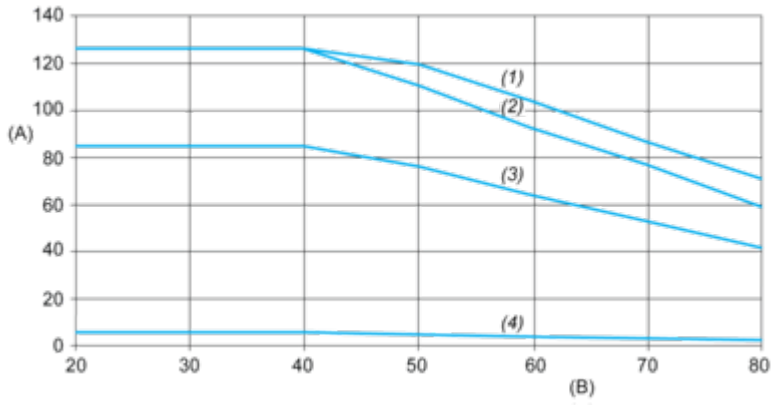
mm
in.



- (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) No Heatsink

Technical Illustration

Dimensions

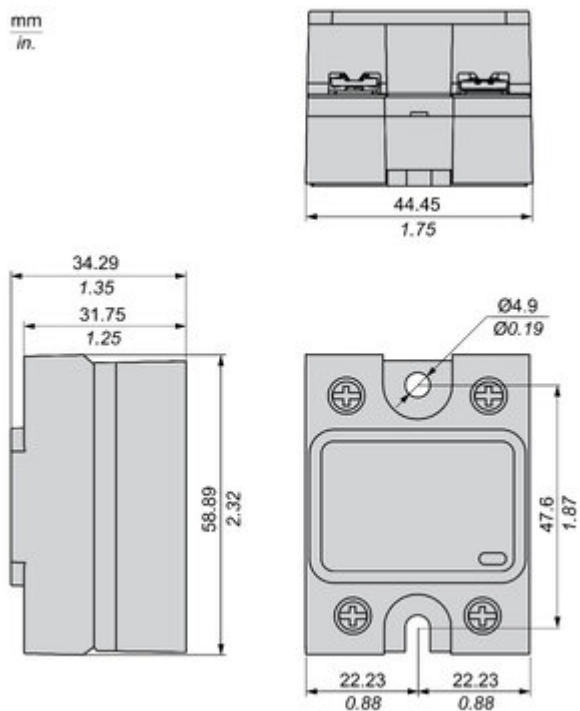
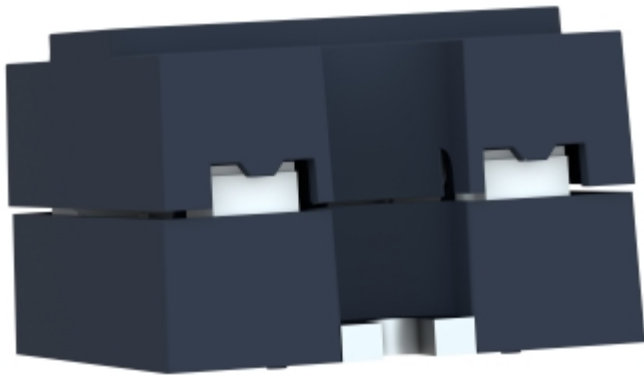


Image of product / Alternate images

Alternative





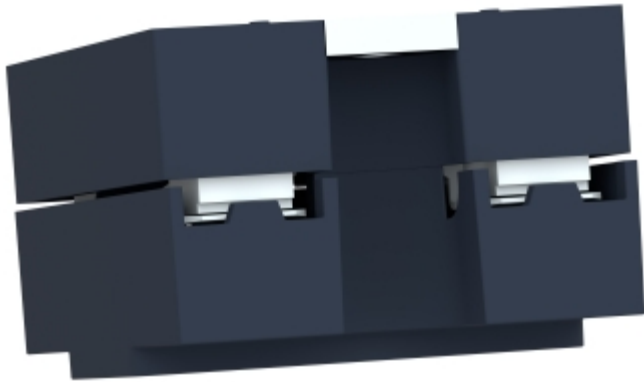


Image of product in real life situation

