Product data sheet
Characteristics

SSP1A4125M7
Solid state relay, Harmony, 125A, panel mount, zero voltage switching, input 90…280V AC, output 48…660V AC



Main

Range of Product	Harmony Solid State Relays
Product or Component Type	Solid state relay up to 125 A
Device short name	SSP1
Mounting Support	Panel
Number of phases	1 phase
Line Rated Current	125 A
Solid state output type	Zero voltage switching SCR output
Output switching mode	Zero voltage switching

Complementary

[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 16.6 ms
Maximum I²t for fusing	12709 A².S for 8.33 ms at 60 Hz 13950 A².s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 80 A miniature circuit breaker (MCB) B Type 2 - 63 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
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 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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein.
This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications.
It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof.
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Thermal resistance	0.22 °C/W junction to case
LED indicator	LED, green input
IP degree of protection	IP20
Safety reliability data	MTTFd = 1875.9 years B10d = 1731395
Net Weight	3.15 oz (89.2 g)
Device presentation	Complete product

Environment

Ambient Air Temperature for Operation	-40…176 °F (-40…80 °C)
Ambient Air Temperature for Storage	-40…257 °F (-40…125 °C)
Pollution degree	2
Overvoltage category	III
Product Certifications	EAC CE CSA UL
Marking	UL CE EAC CSA
Standards	EN/IEC 60950-1 EN/IEC 62314 UL 508 CSA C22.2 No 14-13

Ordering and shipping details

Category	22375-INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3606485441993
Returnability	No

Packing Units

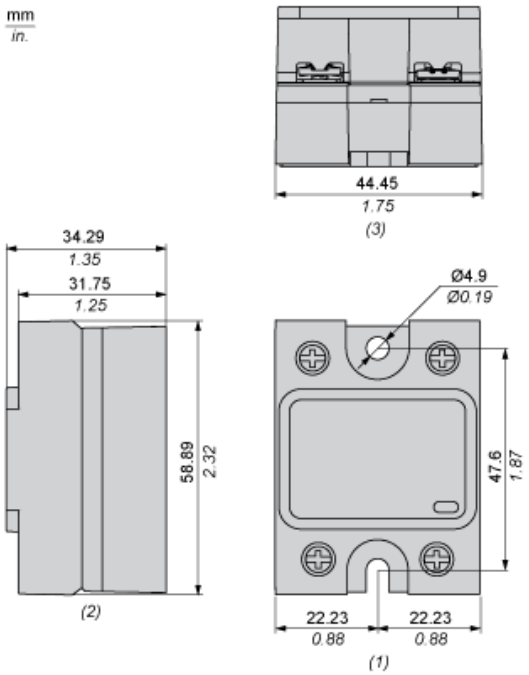
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.50 in (3.8 cm)
Package 1 Width	1.89 in (4.8 cm)
Package 1 Length	2.64 in (6.7 cm)
Package 1 Weight	3.63 oz (103.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	5.91 in (15.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	7.46 lb(US) (3.382 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
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
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes

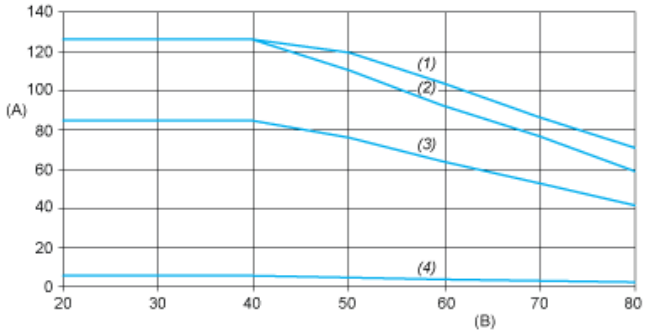
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Dimensions



(1) Front view
(2) Side view
(3) Bottom view

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