Product data sheet
Characteristics

SSP1A475M7T
single phase relay, Harmony Solid State Relays, 75A, panel mount, zero voltage switching, thermal pad, input 90 to 280V AC, output 48 to 660V AC

Main

Range of product	Harmony Solid State Relays
Provided accessory	Thermal pad
Product or component type	Solid state relay up to 75 A
Device short name	SSP1
Number of phases	1 phase
[In] rated current	75 A
Solid state output type	SCR output Zero voltage switching
Output switching mode	Zero voltage switching

Complementary

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
Load current	0.15…75 A
Transient overvoltage	1200 V
Surge current	1000 A for 16.6 ms
Maximum I²t for fusing	4150 A².S for 8.33 ms at 60 Hz 4555 A².s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 50 A miniature circuit breaker (MCB) - curve B Type 2 - 40 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	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 for input Screw terminals: 0.5...5.26 mm², (AWG 20...AWG 10) with cable end for output Screw terminals: 0.2...3.3 mm², (AWG 24...AWG 12) without cable end for input Screw terminals: 0.5...8.26 mm², (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	0.3 °C/W junction to case
Thermal pad impedance	0.48 °C-in²/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	EAC[RETURN]CE[RETURN]UL[RETURN]CSA
Marking	UL EAC CSA CE
Standards	UL 508 CSA C22.2 No 14-13 IEC 60950-1 IEC 62314

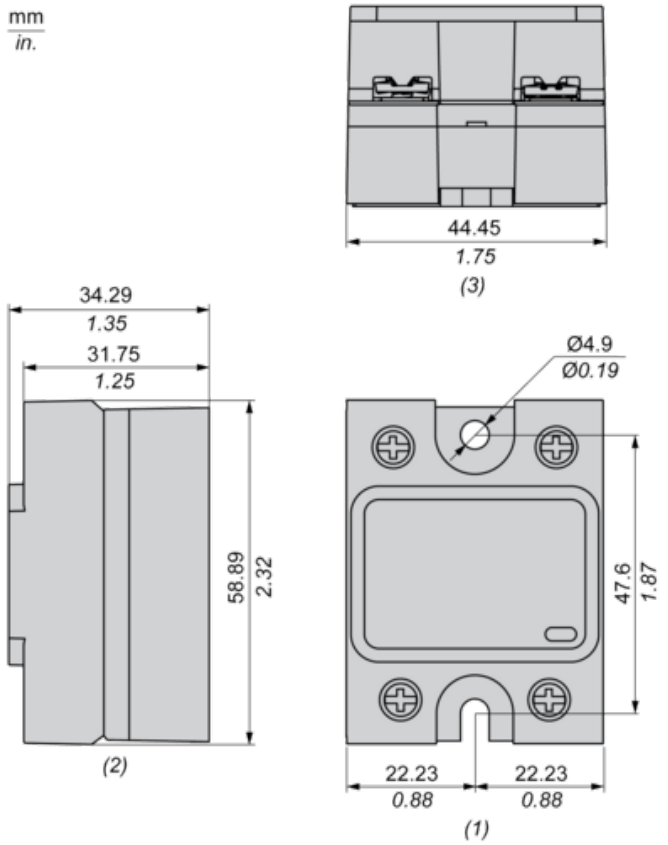
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.0 cm
Package 1 Width	4.7 cm
Package 1 Length	6.5 cm
Package 1 Weight	101.0 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	3.377 kg

Offer Sustainability

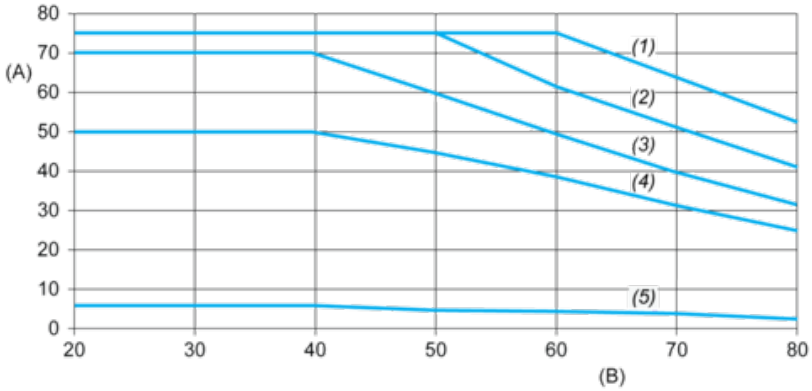
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
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) For Heatsink SSRHD10
(5) No Heatsink