



## Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Provided accessory	Thermal pad
Device short name	SSP1
Mounting support	Panel
Number of phases	1 phase
Contacts type and configuration	1 NO
Line Rated Current	125 A
Solid state output type	SCR output Zero voltage switching

## Complementary

[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...125 A
Transient overvoltage	1200 V
Surge current	1750 A 16.6 ms
Maximum I <sup>2</sup> t for fusing	12709 A <sup>2</sup> .s 8.33 ms 60 Hz 13950 A <sup>2</sup> .s 10 ms 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 500 V DC
Maximum capacitance	8 pF input/output
Dielectric strength	4 KV AC input/output 4 kV AC 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 input 2...2.2 N.m output 17.7...19.47 lb.in output 13.27...15.04 lb.in input 0.5...0.6 N.m auxillary terminal 4.4...5.3 lb.in auxillary terminal

Connections - terminals	Screw terminals 0.2...3.3 mm <sup>2</sup> , AWG 24...AWG 12) with cable end input Screw terminals 0.5...5.26 mm <sup>2</sup> , AWG 20...AWG 10) with cable end output Screw terminals 0.2...3.3 mm <sup>2</sup> , AWG 24...AWG 12) without cable end input Screw terminals 0.5...8.26 mm <sup>2</sup> , 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
Auxiliary/Alarm connection terminal	Screw-type connector, 0.5...1.5 mm <sup>2</sup> AWG 20...AWG 16) slotted Philips
Thermal resistance	0.22 °C/W junction to case
LED indicator	LED, steady, green ON status control input/test button actuated LED, steady, amber ON status load LED, flashing, amber control input to energise load LED, steady, red open-circuit control input LED, flashing, red load cut-off/short-circuit
Maximum alarm output current	30 mA 32 V DC
Minimum load current	150 mA
IP degree of protection	IP20
Electromagnetic compatibility	Electrostatic discharge 6 kV criteria A contact discharge IEC 61000-4-2 Electrostatic discharge 8 kV criteria A air discharge IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test criteria A output ports IEC 61000-4-3 Radiated radio-frequency electromagnetic field immunity test criteria B alarm port IEC 61000-4-3 Electrical fast transient/burst immunity test 1 kV, 5/100 kHz criteria B output ports IEC 61000-4-4 Surge immunity test 1 kV criteria A output ports line to line IEC 61000-4-5 Surge immunity test 2 kV criteria A output ports line to earth IEC 61000-4-5
Safety reliability data	MTTFd = 1875.9 years B10d = 1731395
Net weight	3.43 oz (97.1 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	RoHS CE EAC UL CSA
Marking	CE EAC CSA UL
Standards	CSA C22.2 No 14-13 EN/IEC 62314 UL 508 EN/IEC 60950-1

## Ordering and shipping details

Category	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	03606485442273
Nbr. of units in pkg.	1
Package weight(Lbs)	1 lb(US) (0.45 kg)
Returnability	No

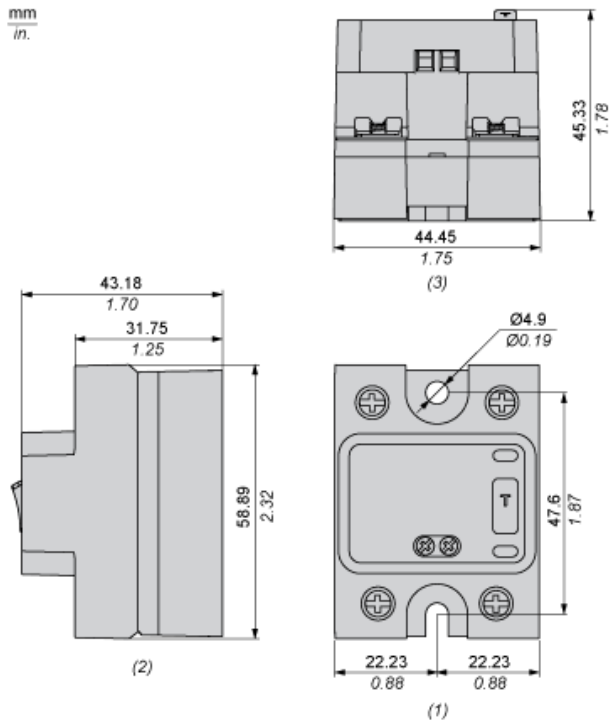
## Packing Units

Package 1 Height	0.460 dm
Package 1 width	0.450 dm
Package 1 Length	0.590 dm

## 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
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>

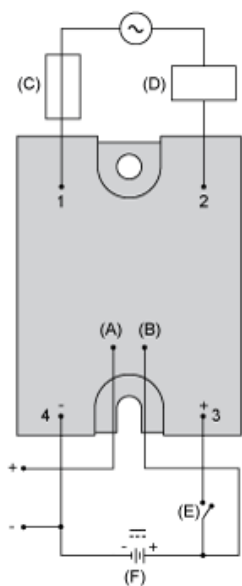
## Dimensions



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

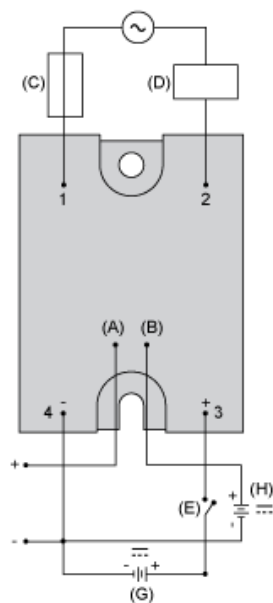
Wiring Diagram

Single Supply Connection



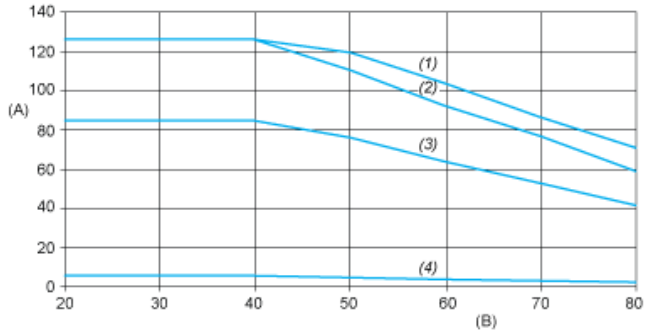
- (F) Control/Auxiliary supply (4...32 V DC)
- (A) Alarm output terminal (4...32 V DC)
- (B) Auxiliary supply terminal
- (C) Fuse or circuit-breaker
- (D) Load
- (E) Switch to energize load

Dual Supply Connection



- (G) Control supply (4...32 V DC)
- (H) Auxiliary supply (4...32 V DC)
- (A) Alarm output terminal (4...32 V DC)
- (B) Auxiliary supply terminal
- (C) Fuse or circuit-breaker
- (D) Load
- (E) Switch to energize load

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