



## Main

Range of product	Zelio Relay
Product or component type	Solid state relay
Device short name	SSP1
Mounting support	Panel
Phase	1 phase
Contacts type and composition	1 NO
Line Rated Current	50 A
Solid state output type	Zero voltage switching SCR output

## 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 limits	7...12 mA
Output voltage	48...660 V AC
Load current	0.15...50 A
Absolute maximum voltage	1200 V
Surge current	<= 625 A for 16.6 ms
Maximum I <sup>2</sup> t for fusing	1770 A <sup>2</sup> .s for 10 ms at 50 Hz half cycle 1629 A <sup>2</sup> .s for 8.33 ms at 60 Hz half cycle
Protection device type	Type 1 - 40 A miniature circuit breaker (MCB) - curve B Type 2 - 32 A miniature circuit breaker (MCB) - curve B
Leakage current	<= 1 mA off-state
Voltage drop	1.15 V on-state
DV/dt	500 V/μs off-state at maximum voltage
Cos phi	0.5 with maximum load
Motor power hp	5 hp 480 V AC 0.75 hp 120 V AC 2 hp 240 V AC
Insulation resistance	1000 MOhm at 500 V DC
Capacitance unbalance	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
Connections - terminals	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 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
Thermal resistance	0.45 °C/W junction to case
Local signalling	LED, green input
IP degree of protection	IP20

The information provided in this documentation contains general descriptions and/or technical characteristics 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. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Safety reliability data

MTTFd = 1875.9 years  
B10d = 1731395

Product weight

3.15 oz (89.2 g)

## 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

CE  
CSA  
RoHS  
UL  
REACH  
EAC

marking

CE  
CSA  
UL  
EAC

standards

EN/IEC 60950-1  
UL 508  
EN/IEC 62314  
CSA C22.2 No 14-13

## Offer Sustainability

Green Premium product

Green Premium product

Compliant - since 1522 - Schneider Electric declaration of conformity

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Reference not containing SVHC above the threshold

Reference not containing SVHC above the threshold

Available

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Available

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WARNING: This product can expose you to chemicals including:

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Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.

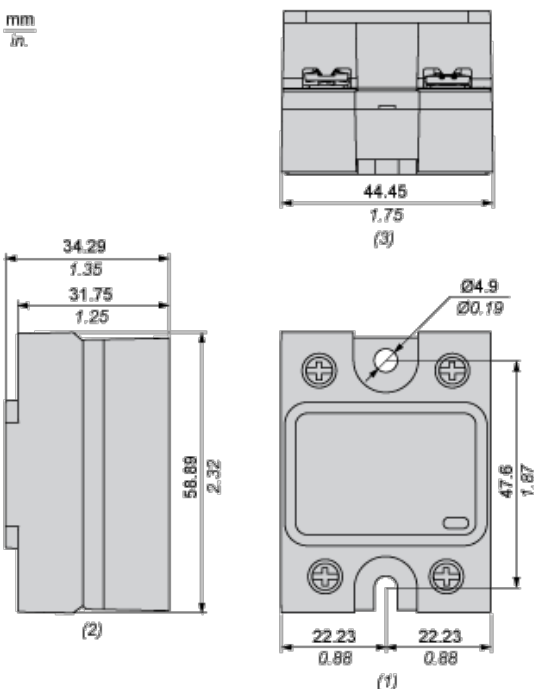
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For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

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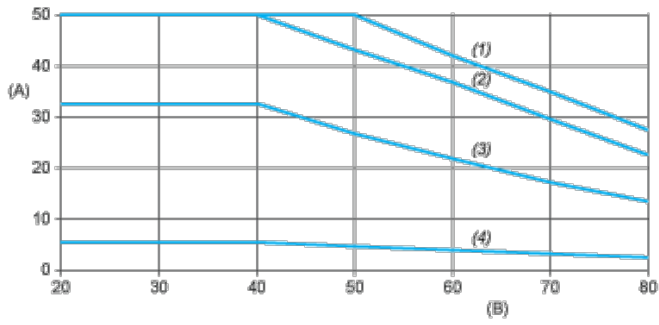
## Dimensions

mm  
in.



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

### Derating Curves



- A : Load Current (Arms)
- B : Ambient Temperature (°C)
- (1) For Heatsink SSRHP07
- (2) For Heatsink SSRHD10
- (3) For Heatsink SSRHP17
- (4) No Heatsink