



### Main

|                               |                                      |
|-------------------------------|--------------------------------------|
| Range of product              | Zelio Relay                          |
| Product or component type     | Solid state relay                    |
| Provided equipment            | Thermal pad                          |
| Device short name             | SSP1                                 |
| Mounting support              | Panel                                |
| Network number of phases      | 1 phase                              |
| Contacts type and composition | 1 NO                                 |
| [In] rated current            | 50 A                                 |
| Solid state output type       | SCR output<br>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<br>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                       | $\leq 625$ 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<br>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<br>Type 2 - 32 A miniature circuit breaker (MCB) - curve B |
| Leakage current                     | $\leq 1$ mA off-state  |
| Voltage drop                        | 1.15 V on-state  |

Disclaimer: 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

|  |   |
|--|---|
| DV/Dt                                  | 500 V/ $\mu$ s off-state at maximum voltage   |
| Cos phi                                | 0.5 with maximum load   |
| Motor power hp                         | 0.75 hp 120 V AC<br>2 hp 240 V AC<br>5 hp 480 V AC  |
| Insulation resistance                  | 1000 MOhm at 500 V DC   |
| Capacitance unbalance                  | 8 pF for input/output   |
| Dielectric strength                    | 4 kV AC for input/output<br>4 kV AC for input or output to case   |
| [Uimp] rated impulse withstand voltage | 6 kV output to case<br>6 kV input to output   |
| Tightening torque                      | 1.5...1.7 N.m for input<br>2...2.2 N.m for output   |
| Connections - terminals                | Forked type tag connectors : 9.2 x 4 mm for input<br>Ring lugs : 9.2 x 4 mm for input<br>Forked type tag connectors : 11.7 x 4.5 mm for output<br>Ring lugs : 11.7 x 4.5 mm for output<br>Screw terminals : 0.2...3.3 mm <sup>2</sup> , (AWG 24...AWG 12) with cable end for input<br>Screw terminals : 0.5...5.26 mm <sup>2</sup> , (AWG 20...AWG 10) with cable end for output<br>Screw terminals : 0.2...3.3 mm <sup>2</sup> , (AWG 24...AWG 12) without cable end for input<br>Screw terminals : 0.5...8.26 mm <sup>2</sup> , (AWG 20...AWG 8) without cable end for output |
| Thermal resistance                     | 0.45 °C/W junction to case  |
| Thermal impedance                      | 0.48 °C-in <sup>2</sup> /W at 25 psi  |
| Local signalling                       | LED, green for input  |
| IP degree of protection                | IP20  |
| Safety reliability data                | MTTFd = 1875.9 years<br>B10d = 1731395  |
| Product weight                         | 89.2 g  |

## Environment

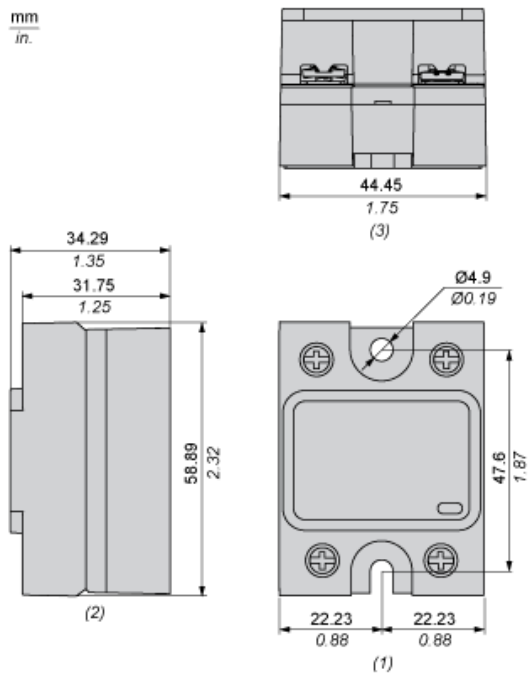
|                                       |  |
|---------------------------------------|--|
| Ambient air temperature for operation | -40...80 °C  |
| Ambient air temperature for storage   | -40...125 °C   |
| Pollution degree                      | 2  |
| Overvoltage category                  | III  |
| Product certifications                | CSA<br>CE<br>REACH<br>EAC<br>UL<br>RoHS                        |
| Marking                               | CSA<br>CE<br>UL<br>EAC   |
| Standards                             | UL 508<br>CSA C22.2 No 14-13<br>EN/IEC 60950-1<br>EN/IEC 62314 |

## Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 1522 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold<br><a href="#">Reference not containing SVHC above the threshold</a>                |
| Product environmental profile    | Available<br><a href="#">Product environmental</a>  |
| Product end of life instructions | Available<br><a href="#">End of life manual</a>   |

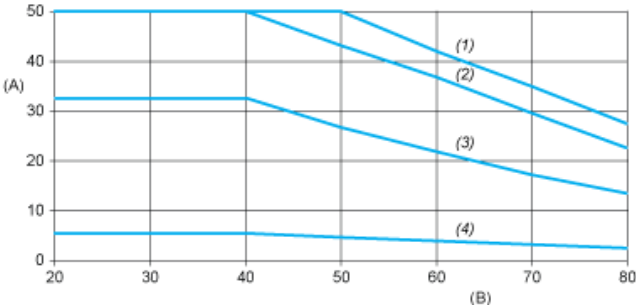
Dimensions

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