

# SSP1D425BDT

solid state relay -panel mount-thermal pad-  
input 3.5-32VDC, output 1-150VDC,25 A



## Main

|                                 |                               |
|---------------------------------|-------------------------------|
| Range of product                | Zelio 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                          |
| [In] rated current              | 25 A                          |
| Solid state output type         | Mosfet output<br>DC switching |

## Complementary

|  |   |
|--|---|
| Control circuit voltage                | 3.5...32 V DC   |
| Switching voltage                      | >= 3.5 V DC turn-on<br><= 1 V DC turn-off   |
| Response time                          | 0.1 ms turn-off<br>0.1 ms turn-on   |
| Input current                          | 10...15 mA  |
| Output voltage                         | 1...150 V DC  |
| Load current                           | 0...25 A  |
| Surge current                          | <= 106 A for 10 ms  |
| Co-ordination type                     | Type 2 - 13 A miniature circuit breaker (MCB) - curve B<br>Type 1 - 25 A miniature circuit breaker (MCB) - curve B  |
| Leakage current                        | <= 0.3 mA off-state   |
| Voltage drop                           | 2.1 V on-state  |
| Insulation resistance                  | 1000 MOhm at 500 V DC   |
| Maximum capacitance                    | 50 pF for input/output  |
| Dielectric strength                    | 2.5 kV AC for input or output to case<br>2.5 kV AC for input/output   |
| [Uimp] rated impulse withstand voltage | 2.5 kV output to case   |
| Tightening torque                      | 2...2.2 N.m for output<br>1.5...1.7 N.m for input   |
| Connections - terminals                | Ring lugs : 11.7 x 4.5 mm for output<br>Forked type tag connectors : 11.7 x 4.5 mm for output<br>Ring lugs : 9.2 x 4 mm for input<br>Forked type tag connectors : 9.2 x 4 mm for input<br>Screw terminals : 0.5...8.26 mm <sup>2</sup> , (AWG 20...AWG 8) without 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...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) with cable end for input |
| Thermal resistance                     | 0.22 °C/W junction to case  |
| Thermal pad impedance                  | 0.48 °C-in <sup>2</sup> /W at 25 psi  |
| LED indicator                          | LED green for input status  |
| IP degree of protection                | IP20  |
| Product weight                         | 89.2 g  |

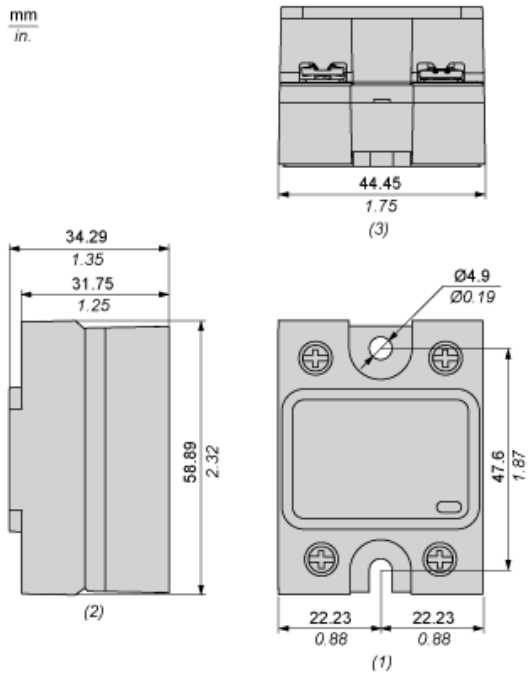
The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products 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. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## 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                | CE<br>CSA<br>RoHS<br>UL<br>REACH<br>EAC                        |
| Marking                               | CE<br>CSA<br>UL<br>EAC   |
| Standards                             | EN/IEC 60950-1<br>UL 508<br>EN/IEC 62314<br>CSA C22.2 No 14-13 |

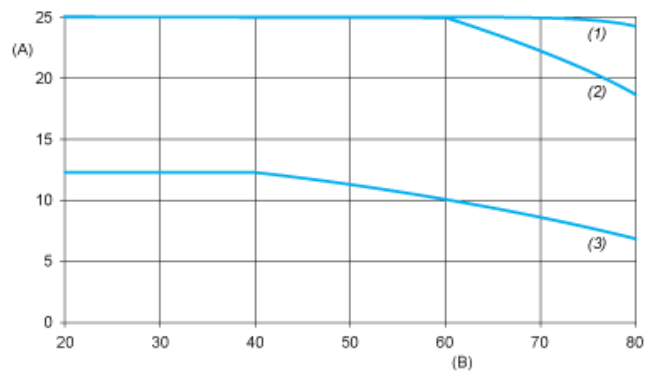
Dimensions

mm  
in.



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

Derating Curves



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