

# SSM1A455BD

solid state relay - DIN rail mount - input  
4-32Vdc, output 48-660Vac, 55A



## Main

Range of product	Zelio Relay
Product or component type	Solid state relay
Device short name	SSM

## Complementary

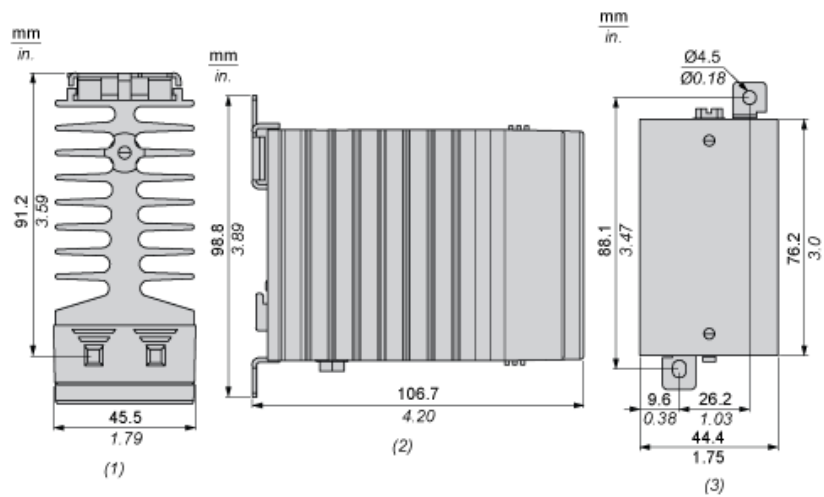
Mounting support	Symmetrical DIN rail
[In] rated current	55 A
Output voltage	48...600 V AC
Control circuit voltage	4...32 V DC
Contacts type and composition	1 NO
Tightening torque	1.1...1.7 N.m for output 0.6...0.7 N.m for input
Connections - terminals	Screw terminals 1 x 0.2...1 x 8.4 mm <sup>2</sup> (AWG 24...AWG 8) for output Screw terminals 1 x 0.2...1 x 3.3 mm <sup>2</sup> (AWG 24...AWG 12) for input
Capacitance unbalance	<= 8 pF for input/output
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	LED green for input status
Switching voltage	1 V DC turn-off 4 V DC turn-on
Input current limits	14...17 mA
Solid state output type	Zero voltage switching SCR output
Load current	0.15...55 A
Absolute maximum voltage	1200 V
Surge current	1000 A for 8.3 ms
Voltage drop	1.7 V on-state
Maximum I <sup>2</sup> t for fusing	4150 A <sup>2</sup> .s for 8.3 ms
Leakage current	<= 1 mA off-state
DV/Dt	500 V/μs off-state at maximum voltage
Response time	0.5 cycle turn-off 0.5 cycle turn-on
Overvoltage category	III
Width	45 mm
Height	99 mm
Depth	107 mm
Product weight	0.476 kg

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

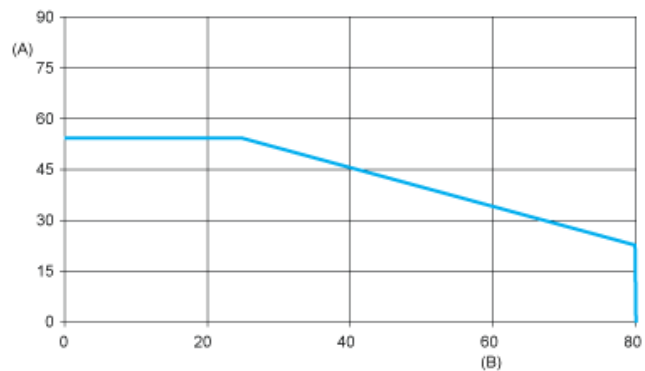
Dielectric strength	4 kV AC for input or output to case 4 kV AC for input/output
Pollution degree	2
Standards	IEC 61000 IEC 60950-1
Product certifications	CSA UL REACH
Marking	CE
IP degree of protection	IP20
Ambient air temperature for operation	-40...80 °C
Ambient air temperature for storage	-40...125 °C

## Dimensions



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

Derating Curves



A : Load Current (Amperes)  
B : Ambient Temperature (°C)