

# SSM1A120BD

solid state relay - DIN rail mount - input  
4-32Vdc, output 24-280Vac, 20A



## Main

Range of product	Zelio Relay
Product or component type	Solid state relay
Device short name	SSM1
Number of phases	1 phase

## Complementary

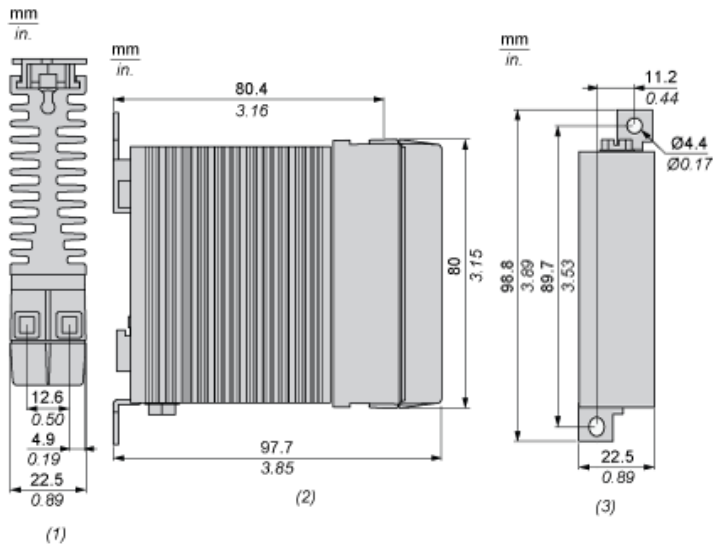
Mounting support	Symmetrical DIN rail
[In] rated current	20 A
Output voltage	24...280 V AC
Control circuit voltage	4...32 V DC
Contacts type and configuration	1 NO
Tightening torque	1.36...1.7 N.m for output 0.6...0.7 N.m for input
Connections - terminals	Screw terminals : 1 x 0.2...1 x 5.3 mm <sup>2</sup> , (AWG 24...AWG 10) for output Screw terminals : 1 x 0.2...1 x 5.3 mm <sup>2</sup> , (AWG 24...AWG 10) for input
Maximum capacitance	<= 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	8...12 mA
Solid state output type	Zero voltage switching SCR output
Load current	0.15...20 A
Transient overvoltage	600 V
Surge current	<= 250 A for 16.6 ms
Voltage drop	1.6 V on-state
Maximum I <sup>2</sup> t for fusing	260 A <sup>2</sup> .s for 8.3 ms
Leakage current	<= 10 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
Product weight	0.28 kg

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## Environment

Dielectric strength	4 kV AC for input or output to case 4 kV AC for input/output
Pollution degree	2
Standards	UL 508 IEC 60950-1 CSA C22.2 No 14
Product certifications	CSA UL EAC
Marking	CE CSA UL EAC
IP degree of protection	IP20
Ambient air temperature for operation	-40...80 °C
Ambient air temperature for storage	-40...125 °C

## Dimensions

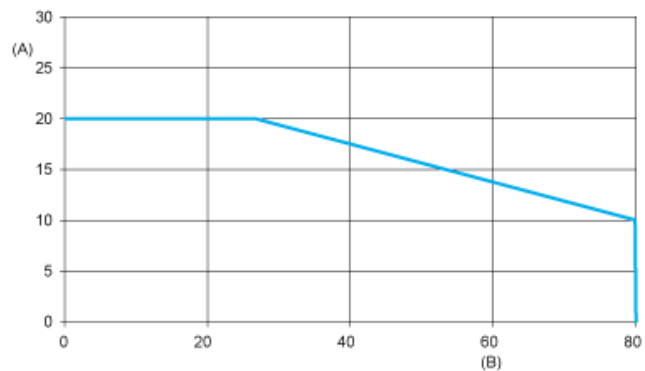


- (1) Top view
- (2) Side view
- (3) Front view

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Derating Curves

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