

SSM1A145BD

solid state relay - DIN rail mount - input 3-32Vdc,
output 24-280Vac, 45A



Main

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

Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	45 A
Output voltage	24...280 V AC
[Uc] control circuit voltage	3...32 V DC
Contacts type and composition	1 NO
Tightening torque	Input : 0.6...0.7 N.m Output : 1.36...1.7 N.m
Connections - terminals	Screw terminals : 1 x 0.2...1 x 3.3 mm ² , (AWG 24...AWG 12) for input Screw terminals : 1 x 0.2...1 x 8.4 mm ² , (AWG 24...AWG 8) for output
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 3 V DC turn-on
Input current limits	14...17 mA
Solid state output type	Zero voltage switching SCR output
Load current	0.15...45 A
Absolute maximum voltage	600 V
Surge current	<= 625 A for 16.6 ms
Voltage drop	1.6 V on-state
Maximum I ² t for fusing	1620 A ² .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-on 0.5 cycle turn-off
Overvoltage category	III
Product weight	0.476 kg

Environment

dielectric strength	4 kV AC for input/output 4 kV AC for input or output to case
pollution degree	2
standards	UL 508 IEC 60950-1 CSA C22.2 No 14
product certifications	CSA

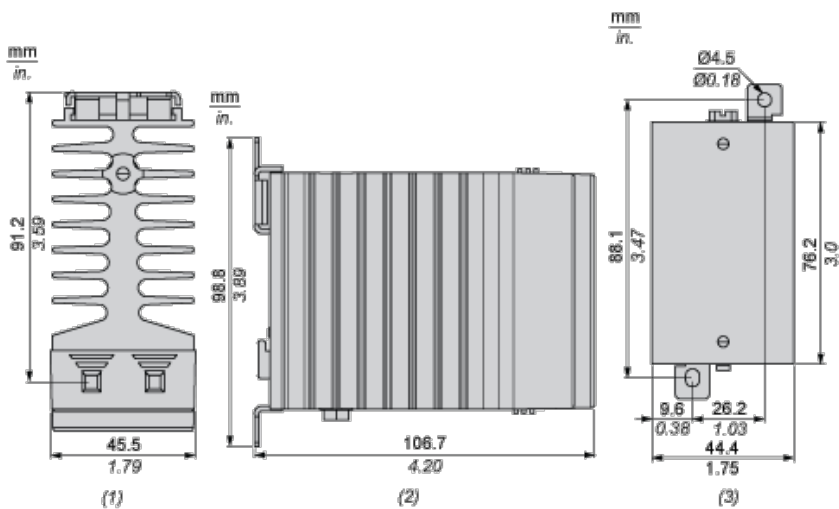
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	UL EAC
marking	CE CSA UL EAC
IP degree of protection	IP20
ambient air temperature for operation	-40...80 °C
ambient air temperature for storage	-40...125 °C

Offer Sustainability

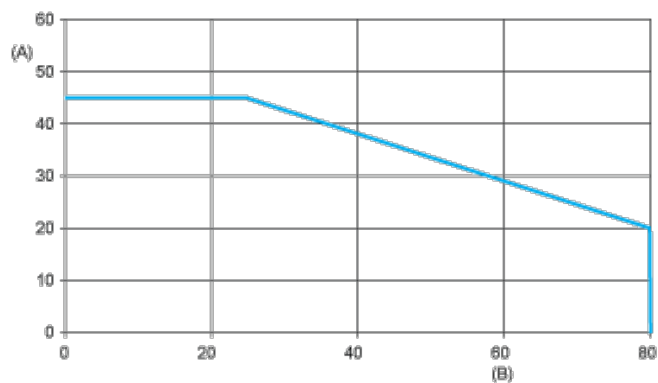
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1522 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Dimensions



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

Derating Curves



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