

SSM1A120M7

solid state relay - DIN rail mount - input
90-280Vac, output 24-280Vac, 20A



Main

Range of product	Harmony 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
[Uc] control circuit voltage	90...280 V AC
Contacts type and configuration	1 NO
Tightening torque	0.6...0.7 N.m for input 1.36...1.7 N.m for output
Connections - terminals	Screw terminals: 1 x 0.2...1 x 5.3 mm ² , (AWG 24...AWG 10) for input Screw terminals: 1 x 0.2...1 x 5.3 mm ² , (AWG 24...AWG 10) for output
Maximum capacitance	8 pF for input/output
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	LED (green)input status:
Switching voltage	90 V AC turn-on 10 V AC turn-off
Input current	2...10 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
Maximum voltage drop	<1.6 V on-state
Maximum I ² t for fusing	260 A ² .s for 8.3 ms

Maximum leakage current	10 mA off-state
DV/Dt	500 V/ μ s off-state at maximum voltage
Response time	10 ms (turn-on) 40 ms (turn-off)
Overvoltage category	III
Product weight	0.28 kg

Environment

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

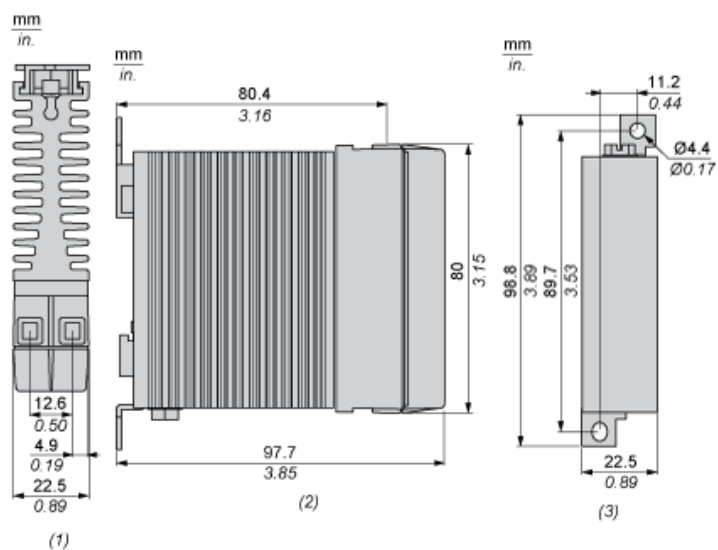
Offer Sustainability

Sustainable offer status	Green Premium product
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

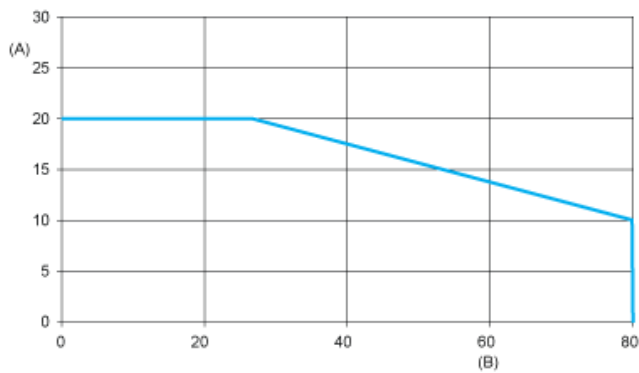
Warranty	18 months
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Dimensions



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

Derating Curves



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