



## 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	45 A
Output voltage	24...280 V AC
[Uc] control circuit voltage	3...32 V DC
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 3.3 mm <sup>2</sup> , (AWG 24...AWG 12) for input Screw terminals: 1 x 0.2...1 x 8.4 mm <sup>2</sup> , (AWG 24...AWG 8) for output
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 3 V DC turn-on
Input current	14...17 mA
Solid state output type	SCR output Zero voltage switching
Load current	0.15...45 A
Transient overvoltage	600 V
Surge current	625 A for 16.6 ms
Maximum voltage drop	<1.6 V on-state
Maximum I <sup>2</sup> t for fusing	1620 A <sup>2</sup> .s for 8.3 ms
Maximum 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
Net weight	0.476 kg

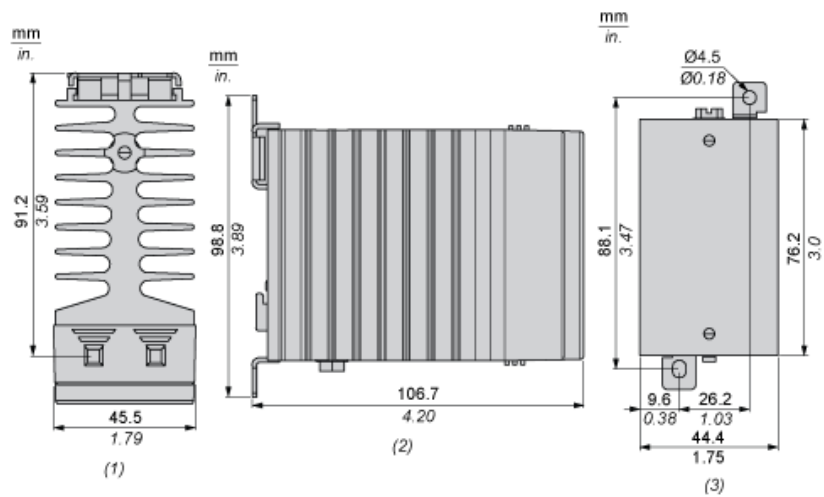
## Environment

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

## Offer Sustainability

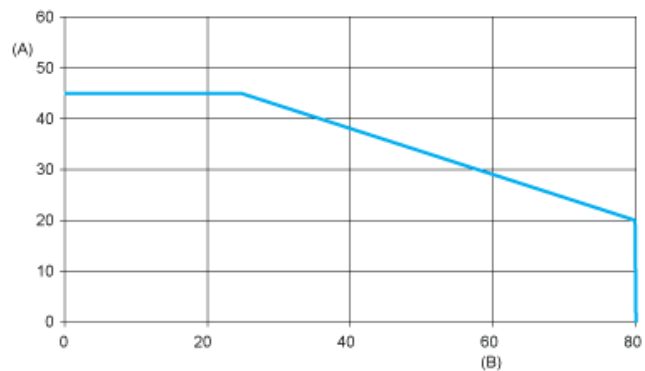
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

## Dimensions



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

## Derating Curves



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