

# SSM1A112F7

Solid state modular relay, 12 A, zero voltage switching, input 90...140 V AC, output 24...280 V AC



## Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Device short name	SSM
Number of channels	1
Number of phases	1 phase

## Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	12 A
Output voltage	24...280 V AC
Contacts type and configuration	1 NO
Tightening torque	0.5...0.8 N.m for input 0.5...0.8 N.m for output
Connections - terminals	Screw terminals: 1 x 0.3...1 x 1.5 mm <sup>2</sup> , (AWG 22...AWG 16) for input Screw terminals: 1 x 0.3...1 x 2.5 mm <sup>2</sup> , (AWG 22...AWG 14) for output
Maximum capacitance	10 pF for input/output
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	LED (green)input status:
Minimum switching voltage	90 V AC turn-on
Maximum switching voltage	10 V AC turn-off
Solid state output type	SCR output Zero voltage switching
Load current	0.15...12 A
Transient overvoltage	600 V
Surge current	715 A for 16.6 ms 750 A for 20 ms
Maximum voltage drop	<1.3 V on-state
Motor power hp	0.33 hp 40 °C 240 V AC
Maximum I <sup>2</sup> t for fusing	2560 A <sup>2</sup> .S for 10 ms at 50 Hz 2330 A <sup>2</sup> .s for 8.33 ms at 60 Hz
Maximum leakage current	0.1 mA off-state
DV/dt	500 V/μs off-state at maximum voltage
Response time	0.5 cycle (turn-on) 30 ms (turn-off)
Power factor	0.5 (with maximum load)
Overvoltage category	III
Width	18 mm
Height	90.3 mm
Depth	83.7 mm
Net weight	0.09 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

Flame retardance	V0 conforming to UL 94
Dielectric strength	4 KV AC for input/output 4 kV AC for input or output to case
Pollution degree	2
Standards	IEC 61000 IEC 60950-1 IEC 62314
Product certifications	REACH UL CSA
Marking	CE
IP degree of protection	IP20
Ambient air temperature for operation	-30...80 °C
Ambient air temperature for storage	-30...100 °C

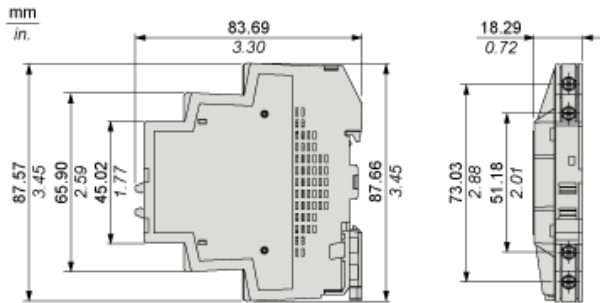
## Packing Units

Package 1 Weight	0.098 kg
Package 1 Height	0.250 dm
Package 1 width	0.900 dm
Package 1 Length	0.950 dm

## 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>

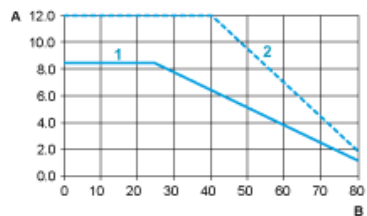
Dimensions



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Derating Curves

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A : Load Current (Amperes)

B : Ambient Temperature (°C)

1 : Multiple units, no minimum spacing between components

2 : Installed single unit, distance to adjacent components more than 18 mm