

# SSM1A112F7

single phase relay, Harmony Solid State Modular Relays, 12A, DIN rail mount, zero voltage switching, input 90 to 140V AC, output 24 to 280V AC



## Main

Range of product	Harmony Solid State Relays
Product or component type	Solid state relay up to 20 A
Device short name	SSM
Number of channels	1
Number of phases	1 phase
Output switching mode	Zero voltage switching

## Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	12 A
Output voltage	24...280 V AC
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) for 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

## 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	UL[RETURN]CSA
Marking	CE
IP degree of protection	IP20
Ambient air temperature for operation	-30...80 °C
Ambient air temperature for storage	-30...100 °C

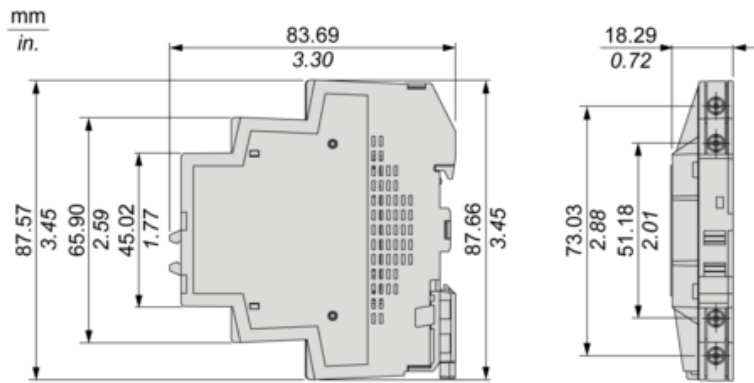
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.5 cm
Package 1 Width	9.0 cm
Package 1 Length	9.5 cm
Package 1 Weight	98.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	72
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	7.722 kg

## 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)
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

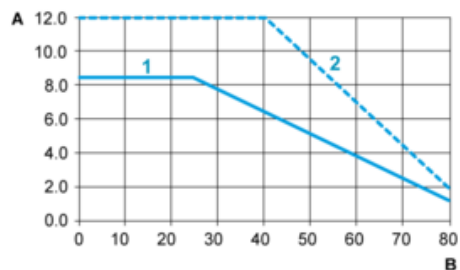
## Dimensions



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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