

Solid state modular relay, Harmony Solid State Relays, 12A, DIN rail mount, zero voltage switching, input 4...32V DC, output 24...280V AC

SSM1A112BD

## Main

Range of product	Harmony Solid State Relays	
Device short name	SSM	
Product or component type	Modular DIN rail relay	
Number of channels	1	
Number of phases	1 phase	
Output switching mode	Zero voltage switching	

# Complementary

Product configuration type	Relay configuration	
Mounting support	Symmetrical DIN rail	
[In] rated current	12 A	
Output voltage	24280 V AC	
[Uc] control circuit voltage	432 V DC	
Tightening torque	0.50.8 N.m for input 0.50.8 N.m for output	
Connections - terminals	Screw terminals: 1 x 0.31 x 1.5 mm², (AWG 22AWG 16) for input Screw terminals: 1 x 0.31 x 2.5 mm², (AWG 22AWG 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	4 V DC turn-on	
Maximum switching voltage	1 V DC turn-off	
input current	911 mA	
Solid state output type	Zero voltage switching SCR output	
Load current	0.1512 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 I²t for fusing	2560 A².s for 10 ms at 50 Hz 2330 A².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) 0.5 cycle (turn-off)	
power factor	0.5 (with maximum load)	
Overvoltage category	III	
Width	18 mm	
Height	90.3 mm	
test button	Without test button	
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 60950-1 IEC 61000 IEC 62314	
Product certifications	UL CSA	
Marking	CE	
IP degree of protection	IP20	
Ambient air temperature for operation	-3080 °C	
Ambient air temperature for storage	-30100 °C	

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.500 cm
Package 1 Width	9.000 cm
Package 1 Length	9.500 cm
Package 1 Weight	90.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	72
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	6.989 kg



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

<b>⊘</b> Environmental footprint	
Total lifecycle Carbon footprint	137
Environmental Disclosure	Product Environmental Profile

### **Use Better**

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	134201bc-d293-4667-9cca-10a7f11729e0

### **Use Again**

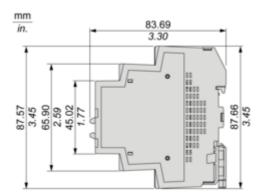
○ Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No

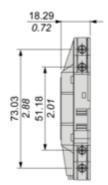
# **Product datasheet**

# SSM1A112BD

## **Dimensions Drawings**

## **Dimensions**



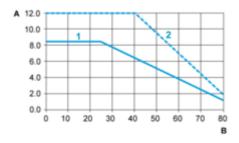


# **Product datasheet**

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### Performance Curves

## **Derating Curves**



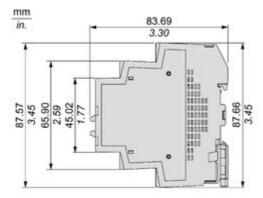
- A: Load Current (Amperes)
- B: Ambient Temperature (°C)
- 1 : Multiple units, no minimum spacing between components
- 2: Installed single unit, distance to adjacent components more than 18 mm

# **Product datasheet**

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**Technical Illustration** 

### **Dimensions**



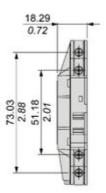


Image of product / Alternate images

**Alternative** 











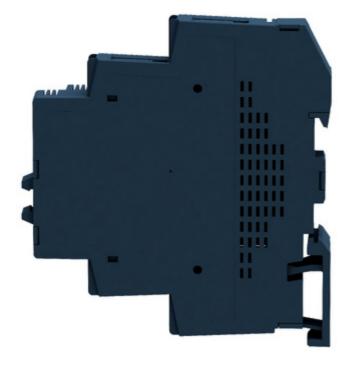


Image of product in real life situation

