Specifications





# Solid state modular relay, 12 A, zero voltage switching, input 4...32 V DC, output 48...600 V AC

Local distributor code: 403014279

SSM1A312BD

#### EAN Code: 3606480579523

### 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

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Product configuration type	Relay configuration
Mounting support	Symmetrical DIN rail
[In] rated current	12 A
Output voltage	48600 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 mm <sup>2</sup> , (AWG 22AWG 16) for input Screw terminals: 1 x 0.31 x 2.5 mm <sup>2</sup> , (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	SCR output Zero voltage switching
Load current	0.1512 A
transient overvoltage	1200 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 A².s for 10 ms at 50 Hz 2330 A².s for 8.33 ms at 60 Hz
Maximum leakage current	0.2 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	
Product 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	CSA UL
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	2.0 cm
Package 1 Width	9.0 cm
Package 1 Length	9.0 cm
Package 1 Weight	94.0 g
Unit Type of Package 2	\$02
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	7.204 kg

## **Contractual warranty**

Warranty

18 months

## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Yes

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

## Well-being performance



Rohs Exemption Information

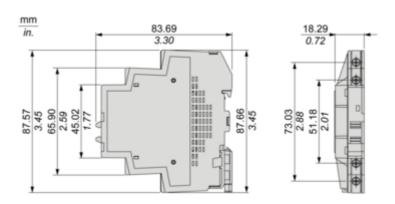
## **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Product datasheet

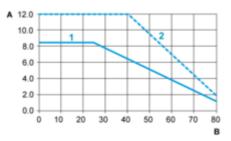
**Dimensions Drawings** 

#### Dimensions



### Performance Curves

#### **Derating Curves**



A : Load Current (Amperes)

B : Ambient Temperature (°C)

1 : Multiple units, no minimum spacing between components

 ${\bf 2}$  : Installed single unit, distance to adjacent components more than 18 mm

## Product datasheet

### **Technical Illustration**

### Dimensions

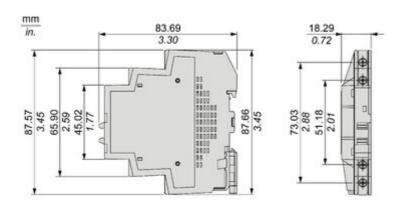


Image of product / Alternate images

Alternative





