

Product data sheet

Specifications



single phase relay, Harmony Solid State Modular Relays, 12A, DIN rail mount, DC switching, input 4 to 32V DC, output 1 to 100V DC

SSM1D312BD

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	DC switching

Complementary

Product configuration type	Relay configuration
Mounting support	Symmetrical DIN rail
[In] rated current	12 A
Output voltage	1...100 V DC
[Uc] control circuit voltage	4...32 V DC
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 ² , (AWG 22...AWG 16) for input Screw terminals: 1 x 0.3...1 x 2.5 mm ² , (AWG 22...AWG 14) for output
maximum capacitance	10 pF for input/output
Insulation resistance	1000 MΩ 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	8...11 mA
Solid state output type	DC switching Mosfet output
Load current	0.0025...12 A
transient overvoltage	100 V
Surge current	100 A for 10 ms
Maximum voltage drop	<0.5 V on-state
Resistance	0.045 Ω on-state
Maximum leakage current	0.1 mA off-state
Response time	1.7 ms (turn-on) 0.3 ms (turn-off)

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 DC for input/output 4 kV DC for input or output to case
Pollution degree	2
Standards	IEC 60950-1 IEC 62314 IEC 61000
Product certifications	CSA UL
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 cm
Package 1 Width	9 cm
Package 1 Length	9.5 cm
Package 1 Weight	91 g
Unit Type of Package 2	S02
Number of Units in Package 2	72
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	7.012 kg



Environmental Data

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 >](#)

Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

Use Better

Materials and Substances

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)

California proposition 65 WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](#)

Use Again

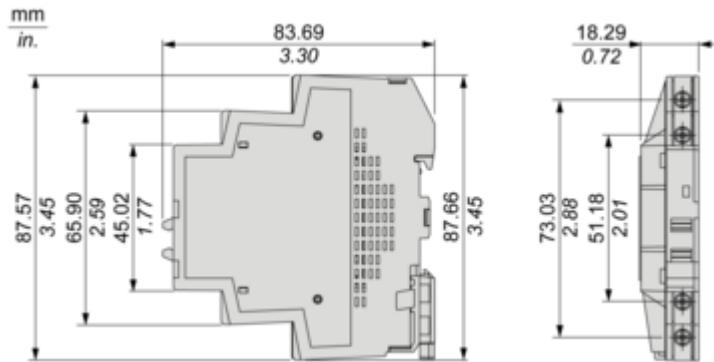
Repack and remanufacture

End of life manual availability [End of Life Information](#)

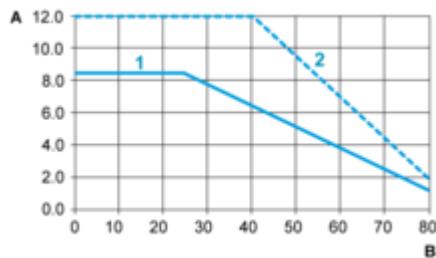
Take-back No

Dimensions Drawings

Dimensions



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

Technical Illustration

Dimensions

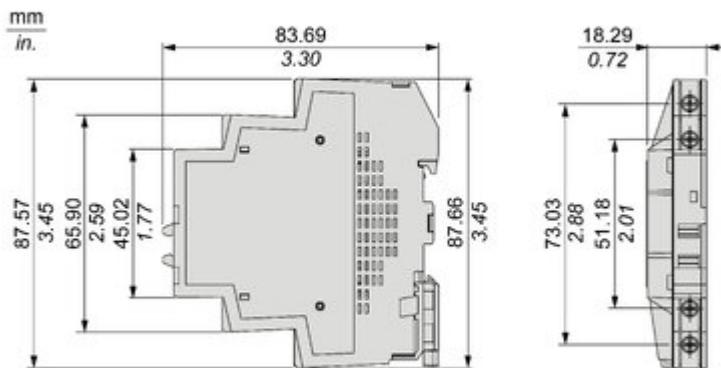


Image of product / Alternate images

Alternative





Image of product in real life situation

