

# SSM1D312BD

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



## 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	DC switching

## Complementary

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 <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	4 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Input current	9...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 Ohm on-state
Maximum leakage current	0.1 mA off-state
Response time	0.6 ms (turn-on) 0.3 ms (turn-off)
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 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[RETURN]UL
Marking	CE
IP degree of protection	IP20
Ambient air temperature for operation	-30...80 °C
Ambient air temperature for storage	-30...100 °C

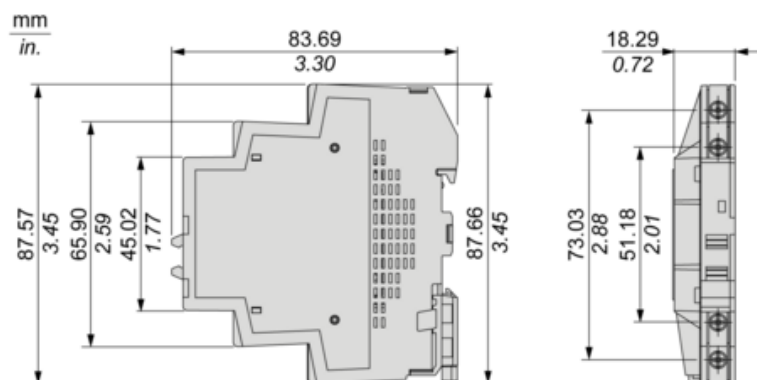
## Packing Units

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

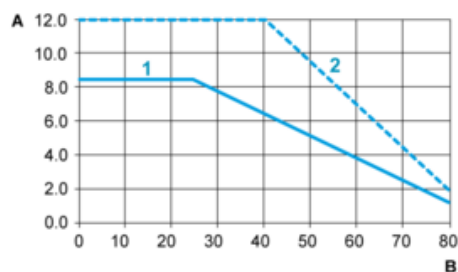
## Offer Sustainability

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



### 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