

Product data sheet

Characteristics

SSM1D212BD

Harmony, Solid state modular relay, 12 A, DIN rail mount, DC switching, input 4...32 V DC, output 1...60 V DC, 1NO



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...60 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 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	60 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 61000 IEC 60950-1 IEC 62314
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

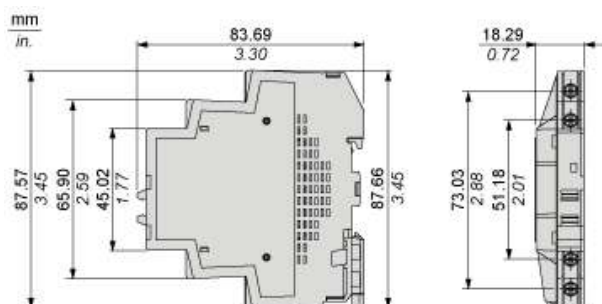
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	98 g
Package 1 Height	2 cm
Package 1 width	9 cm
Package 1 Length	9.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	72
Package 2 Weight	7.197 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

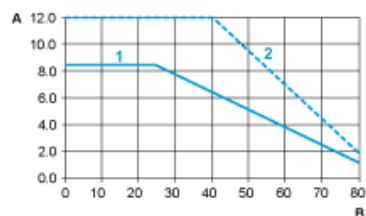
Offer Sustainability

Sustainable offer status	Green Premium product
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information

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