

SSM1A112BD

Solid state modular relay, 12 A, zero voltage switching, input 4...32 V DC, output 24...280 V AC



Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Device short name	SSM
Number of channels	1
Number of phases	1 phase

Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	12 A
Output voltage	24...280 V AC
[Uc] control circuit voltage	4...32 V DC
Contacts type and configuration	1 NO
Tightening torque	0.5...0.8 N.m input 0.5...0.8 N.m output
Connections - terminals	Screw terminals 1 x 0.3...1 x 1.5 mm ² , AWG 22...AWG 16) input Screw terminals 1 x 0.3...1 x 2.5 mm ² , AWG 22...AWG 14) output
Maximum capacitance	10 pF input/output
Insulation resistance	1000 MOhm 500 V DC
Local signalling	Input status LED (green)
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	Zero voltage switching SCR output
Load current	0.15...12 A
Transient overvoltage	600 V
Surge current	715 A 16.6 ms

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

	750 A 20 ms
Maximum voltage drop	<1.3 V on-state
Motor power hp	0.33 hp 104 °F (40 °C) 240 V AC
Maximum I ² t for fusing	2560 A ² .s 10 ms 50 Hz 2330 A ² .s 8.33 ms 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	0.71 in (18 mm)
Height	3.56 in (90.3 mm)
Depth	3.30 in (83.7 mm)
Net weight	0.20 lb(US) (0.09 kg)

Environment

Flame retardance	V0 UL 94
Dielectric strength	4 kV AC input/output 4 kV AC 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	-22...176 °F (-30...80 °C)
Ambient air temperature for storage	-22...212 °F (-30...100 °C)

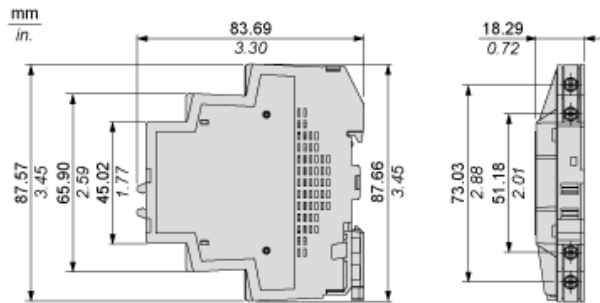
Packing Units

Package 1 Weight	0.22 lb(US) (0.099 kg)
Package 1 Height	0.250 dm
Package 1 width	0.900 dm
Package 1 Length	0.950 dm

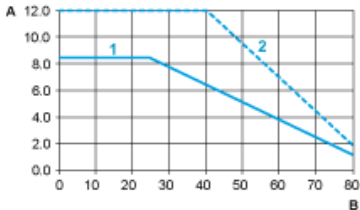
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
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