

Product data sheet

Characteristics

SSM1A112B7R

Harmony Solid State Relays, Solid state modular relay, 12A, DIN rail mount, random switching, input 18...36V AC, output 24...280V AC



Main

Range of product	Harmony Solid State Relays
Product or component type	Modular DIN rail relay
Device short name	SSM
Number of channels	1
Number of phases	1 phase
Output switching mode	Random voltage switching

Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	12 A
Output voltage	24...280 V AC
[Uc] control circuit voltage	18...36 V AC
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	18 V AC turn-on
Maximum switching voltage	4 V AC turn-off
Input current	3.5...8.5 mA
Solid state output type	SCR output Random voltage switching
Load current	0.15...12 A
Transient overvoltage	600 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 ² t for fusing	2560 A ² .S for 10 ms at 50 Hz 2330 A ² .s for 8.33 ms at 60 Hz
Maximum leakage current	0.1 mA off-state
DV/dt	500 V/μs off-state at maximum voltage
Response time	30 ms (turn-off) 20 ms (turn-on)
Power factor	0.5 (with maximum load)
Overvoltage category	III

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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 AC for input/output 4 kV AC for input or output to case
Pollution degree	2
Standards	IEC 61000 IEC 60950-1 IEC 62314
Product certifications	UL[RETURN]CSA
Marking	CE
IP degree of protection	IP20
Ambient air temperature for operation	-30...80 °C
Ambient air temperature for storage	-30...100 °C

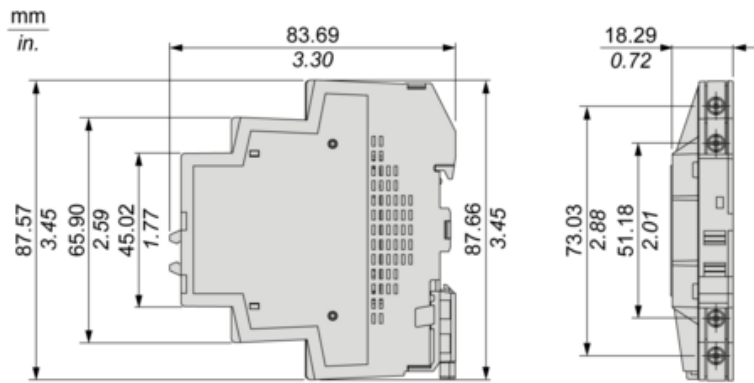
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.5 cm
Package 1 Width	9.0 cm
Package 1 Length	9.5 cm
Package 1 Weight	98.0 g
Unit Type of Package 2	S02
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	7.748 kg

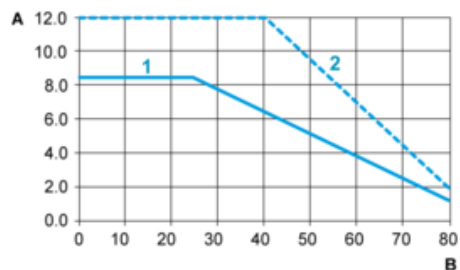
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
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