

Product datasheet

Specifications



solid state relay - DIN rail mount -
input 200-265 V AC, output 48-600
V AC ,12A

SSM1A312P7

Discontinued on: Jan 23, 2021

Discontinued

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	48...600 V AC
[Uc] Control Circuit Voltage	200...265 V AC
Contacts Type And Configuration	1 NO
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 mm², (AWG 22...AWG 16) for input Screw terminals: 1 x 0.3...1 x 2.5 mm², (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	200 V AC turn-on
Maximum Switching Voltage	90 V AC turn-off
Input Current	2.5...3.5 mA
Solid State Output Type	Zero voltage switching SCR output
Load Current	0.15...12 A
Transient Overvoltage	1200 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 I²T For Fusing	2560 A².s for 10 ms at 50 Hz 2330 A².s for 8.33 ms at 60 Hz
Maximum Leakage Current	0.2 mA off-state

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Dv/Dt	500 V/μs off-state at maximum voltage
Response Time	0.5 cycle (turn-on) 30 ms (turn-off)
Power Factor	0.5 (with maximum load)
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 AC for input/output 4 kV AC for input or output to case
Pollution Degree	2
Standards	IEC 61000 IEC 62314 IEC 60950-1
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

Sustainability

Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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[Guide to assess a product’s sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓

Mercury Free

✓

Rohs Exemption Information

Yes

Certifications & Standards

Reach Regulation

[REACH Declaration](#)

Eu Rohs Directive

Pro-active compliance (Product out of EU RoHS legal scope)

China Rohs Regulation

[China RoHS declaration](#)

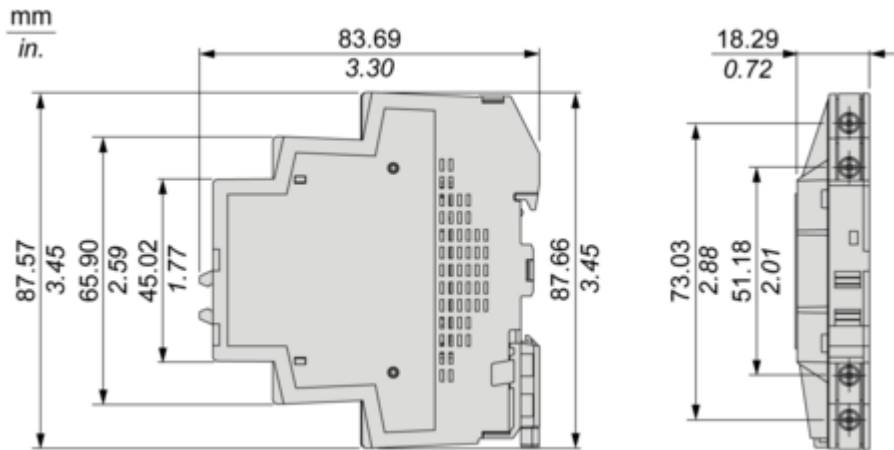
Environmental Disclosure

[Product Environmental Profile](#)

Circularity Profile

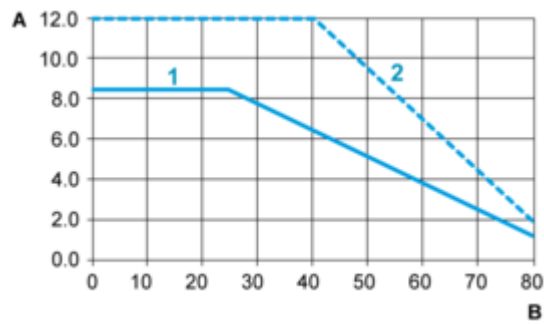
[End of Life Information](#)

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