

Product data sheet

Specifications



Solid state modular relay, Harmony, 12A, DIN rail mount, random switching, input 200-265V AC, output 24...280V AC

SSM1A112P7R

! Discontinued

! Discontinued on: Jun 30, 2023

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range of Product	Harmony Solid State Relays
Device short name	SSM
Product or Component Type	Modular DIN rail relay
Number of Channels	1
Number of phases	1 phase
Output switching mode	Random voltage switching

Complementary

Mounting Support	Symmetrical DIN rail
Line Rated Current	12 A
Output voltage	24...280 V AC
[Uc] control circuit voltage	200...265 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) input Screw terminals 1 x 0.3...1 x 2.5 mm ² , AWG 22...AWG 14) 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	SCR output Random voltage switching
Load current	0.15...12 A
transient overvoltage	600 V
Surge current	715 A 16.6 ms 750 A 20 ms
Maximum voltage drop	<1.3 V on-state
Maximum Horse Power Rating	0.33 hp 104 °F (40 °C) 240 V AC

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

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	0.1 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
Width	0.7 in (18 mm)
Height	3.6 in (90.3 mm)
test button	Without test button
Depth	3.3 in (83.7 mm)
Net Weight	0.20 lb(US) (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	CSA UL
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)

Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
GTIN	3606480579585
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	0.984 in (2.500 cm)
Package 1 Width	3.543 in (9.000 cm)
Package 1 Length	3.740 in (9.500 cm)
Package weight(Lbs)	3.210 oz (91.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	60

Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	13.702 lb(US) (6.215 kg)

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained](#) >

[How we assess product sustainability](#) >



Environmental footprint

[Environmental Disclosure](#)

[Product Environmental Profile](#)

Use Better



Materials and Substances

Packaging made with recycled cardboard

Yes

Packaging without single use plastic

Yes

[EU RoHS Directive](#)

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

SCIP Number

134201bc-d293-4667-9cca-10a7f11729e0

California proposition 65

WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Use Longer



Lifetime extension

Repair

No

Use Again



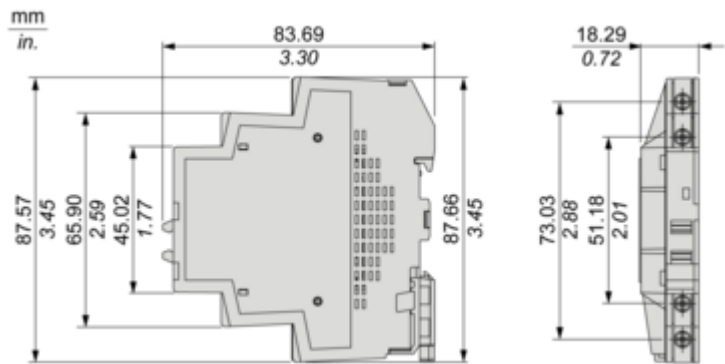
Repack and remanufacture

[Circularity Profile](#)

[End of Life Information](#)

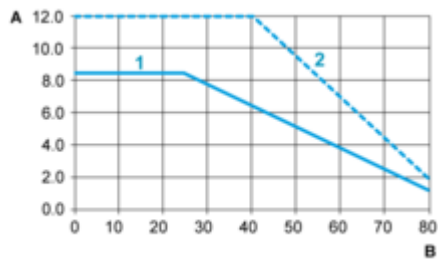
Dimensions Drawings

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

Technical Illustration

Dimensions

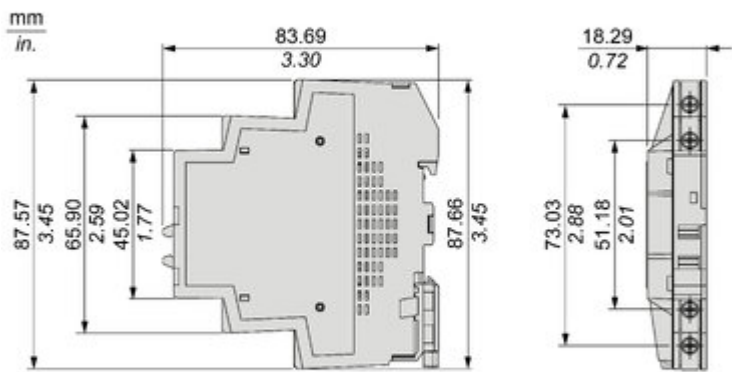
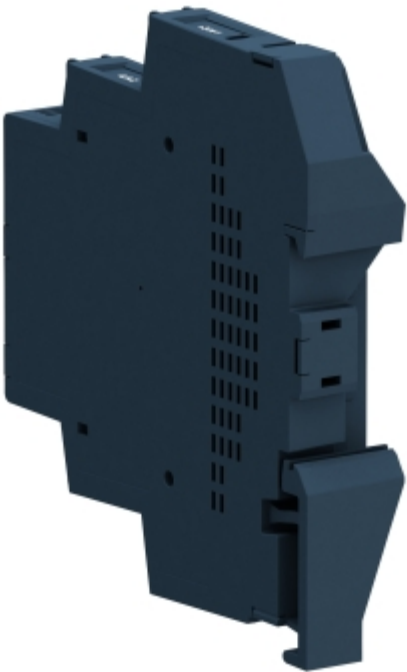


Image of product / Alternate images

Alternative



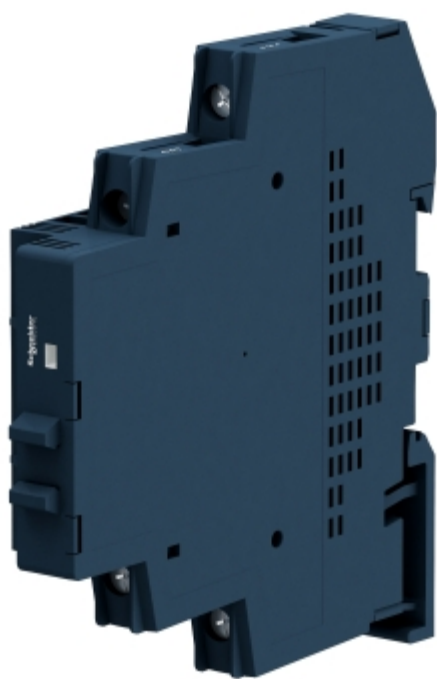


Image of product in real life situation

