

Product data sheet

Specifications



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

SSM1A112B7

! Discontinued

! Discontinued on: Aug 15, 2024

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	Zero voltage switching

Complementary

Mounting Support	Symmetrical DIN rail
Line 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) 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	18 V AC turn-on
Maximum switching voltage	4 V AC turn-off
input current	3.5...8.5 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 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.

Maximum I²t 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	0.5 cycle (turn-on) 30 ms (turn-off)
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	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)

Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
GTIN	3606480579516
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	0.8 in (2.0 cm)
Package 1 Width	3.5 in (9.0 cm)
Package 1 Length	3.5 in (9.0 cm)
Package weight(Lbs)	3.5 oz (98.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	72

Package 2 Height	5.9 in (15.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	16.504 lb(US) (7.486 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

REACH Regulation

[REACH Declaration](#)

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



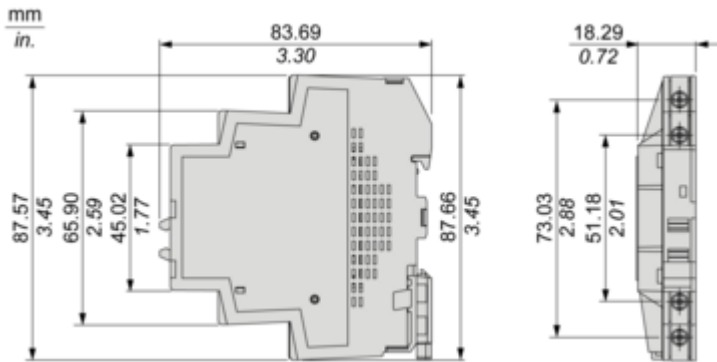
Repack and remanufacture

[Circularity Profile](#)

[End of Life Information](#)

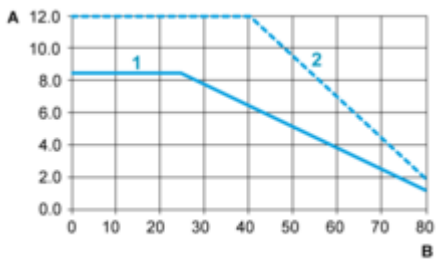
Dimensions Drawings

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

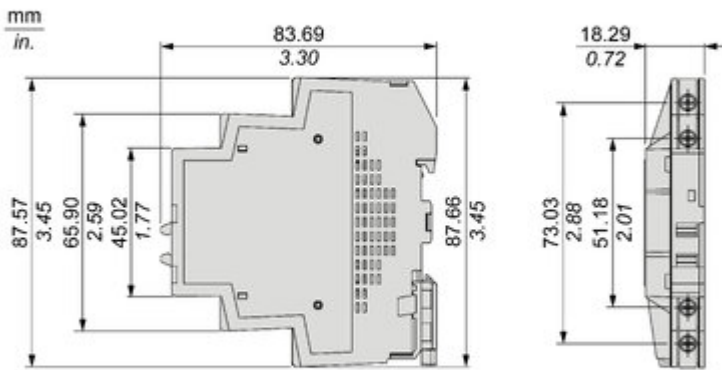


Image of product in real life situation

