

Product data sheet

Specifications



Harmony, Solid state modular relay,
6 A, random switching, input
90â€¦140 V AC, output 24...280 V
AC

SSM1A16F7R

! Discontinued

! Discontinued on: Oct 20, 2020

! End-of-service on: Jan 22, 2021

Main

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

Complementary

Mounting support	Symmetrical DIN rail
[In] rated current	6 A
Output voltage	24...280 V AC
[Uc] control circuit voltage	90...140 V AC
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 mm², AWG 22...AWG 16) input Screw terminals 1 x 0.3...1 x 2.5 mm², AWG 22...AWG 14) output
maximum capacitance	10 pF input/output
Insulation resistance	1000 MOhm 500 V DC
Local signalling	LED (green) for input status
Minimum switching voltage	90 V AC turn-on
Maximum switching voltage	10 V AC turn-off
input current	3...5 mA
Solid state output type	SCR output Random voltage switching
Load current	0.15...6 A
transient overvoltage	600 V
Surge current	285 A 16.6 ms 300 A 20 ms
Maximum voltage drop	<1.3 V on-state
Motor power hp	0.16 hp 104 °F (40 °C) 240 V AC

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	410 A².s 10 ms 50 Hz 375 A².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	30 ms turn-off) 20 ms turn-on)
power factor	0.5 with maximum load)
Overvoltage category	III
Width	0.4 in (11 mm)
Height	3.6 in (90.3 mm)
Depth	3.3 in (83.7 mm)
Net weight	0.11 lb(US) (0.05 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 61000 IEC 62314 IEC 60950-1
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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.4 in (1 cm)
Package 1 Width	3.5 in (9 cm)
Package 1 Length	3.7 in (9.5 cm)
Package 1 Weight	2.7 oz (76 g)

Contractual warranty

Warranty (in months)	18
----------------------	----



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

EU RoHS Directive

[Compliant By Exemption](#)

Use Longer



Lifetime extension

Repair

No

Use Again



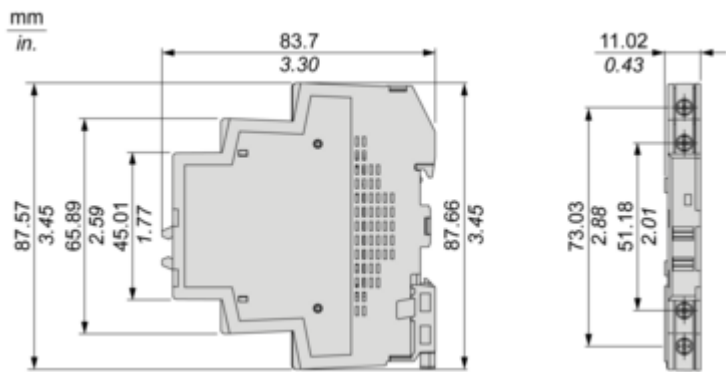
Repack and remanufacture

Circularity Profile

[End of Life Information](#)

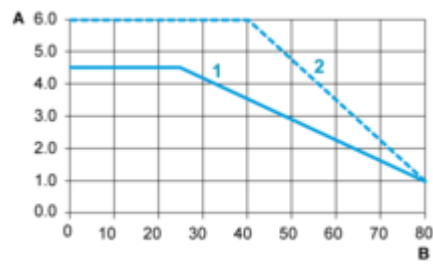
Dimensions Drawings

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 11 mm

Technical Illustration

Dimensions

