

Product data sheet

Specifications



Harmony, Solid state modular relay, 55 A, DIN rail mount, zero voltage switching, input 90...140 V DC, output 48...660 V AC

SSM1A455F7

Discontinued on: May 19, 2023

Discontinued

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

Main

Range Of Product	Harmony Solid State Relays
Product Or Component Type	Solid state relay up to 75 A
Device Short Name	SSM1
Number Of Phases	1 phase
Output Switching Mode	Zero voltage switching

Complementary

Mounting Support	Symmetrical DIN rail
Line Rated Current	55 A
Output Voltage	48...660 V AC
[Uc] Control Circuit Voltage	90...140 V AC
Tightening Torque	0.6...0.7 N.m for input 1.36...1.7 N.m for output
Connections - Terminals	Screw terminals 1 x 0.2...1 x 3.3 mm ² , AWG 24...AWG 12) input Screw terminals 1 x 0.2...1 x 8.4 mm ² , AWG 24...AWG 8) output
Maximum Capacitance	8 pF for input/output
Insulation Resistance	1000 MOhm at 500 V DC
Local Signalling	for input status LED (green)
Switching Voltage	90 V AC turn-on 10 V AC turn-off
Input Current	15 mA at 120 Vrms
Solid State Output Type	Zero voltage switching SCR output
Load Current	0.15...55 A
Transient Overvoltage	1200 V
Surge Current	1000 A 16.6 ms
Maximum Voltage Drop	<1.7 V on-state
Maximum I ² T For Fusing	4150 A ² .s for 8.3 ms
Maximum Leakage Current	1 mA off-state
Dv/Dt	500 V/μs off-state at maximum voltage

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

Response Time	10 ms (turn-on) 40 ms (turn-off)
Overvoltage Category	III
Net Weight	1.05 lb(US) (0.476 kg)

Environment

Dielectric Strength	4 kV AC for input/output 4 kV AC for input or output to case
Pollution Degree	2
Standards	CSA C22.2 No 14 UL 508 IEC 60950-1
Product Certifications	EAC UL CSA
Marking	UL CSA CE EAC
Ip Degree Of Protection	IP20
Ambient Air Temperature For Operation	-40...176 °F (-40...80 °C)
Ambient Air Temperature For Storage	-40...257 °F (-40...125 °C)

Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
Gtin	3606485441672
Returnability	No
Country Of Origin	MX

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.36 in (6.0 cm)
Package 1 Width	4.53 in (11.5 cm)
Package 1 Length	4.65 in (11.8 cm)
Package 1 Weight	18.31 oz (519.0 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	12
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	14.74 lb(US) (6.688 kg)

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.

[Learn more about Green Premium >](#)

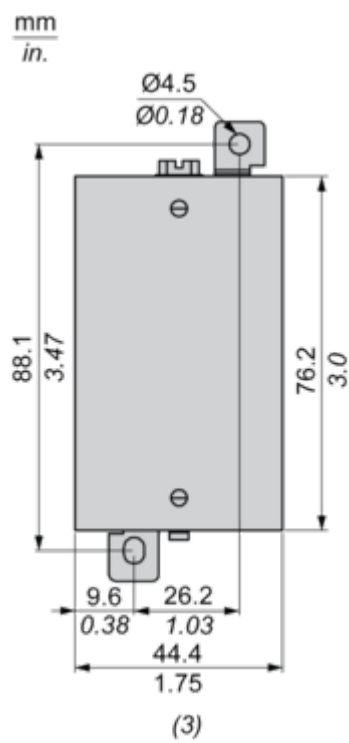
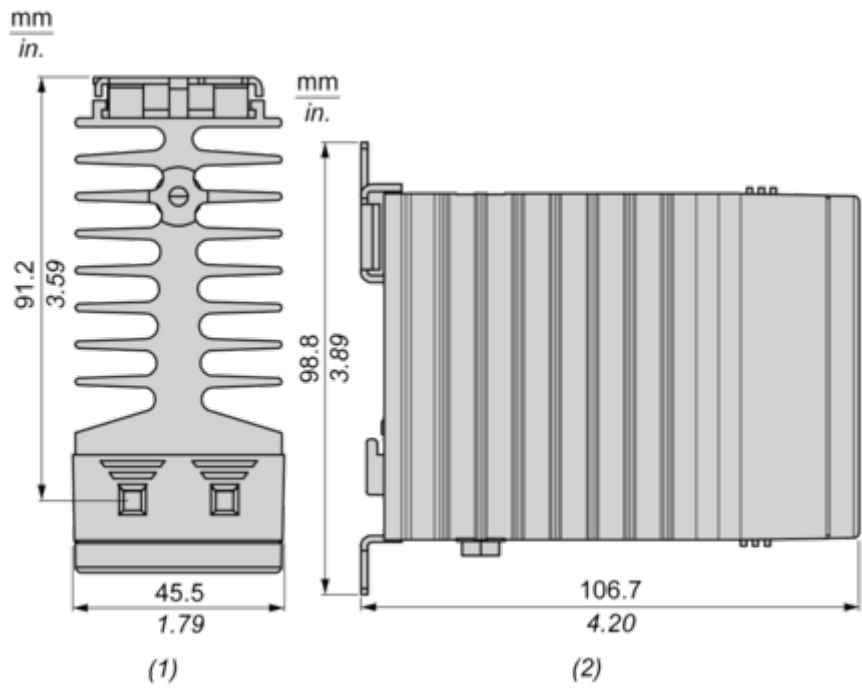
[Guide to assess a product’s sustainability >](#)

Well-being performance

 Mercury Free	
 Rohs Exemption Information	Yes
Reach Regulation	REACH Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS 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

Dimensions Drawings

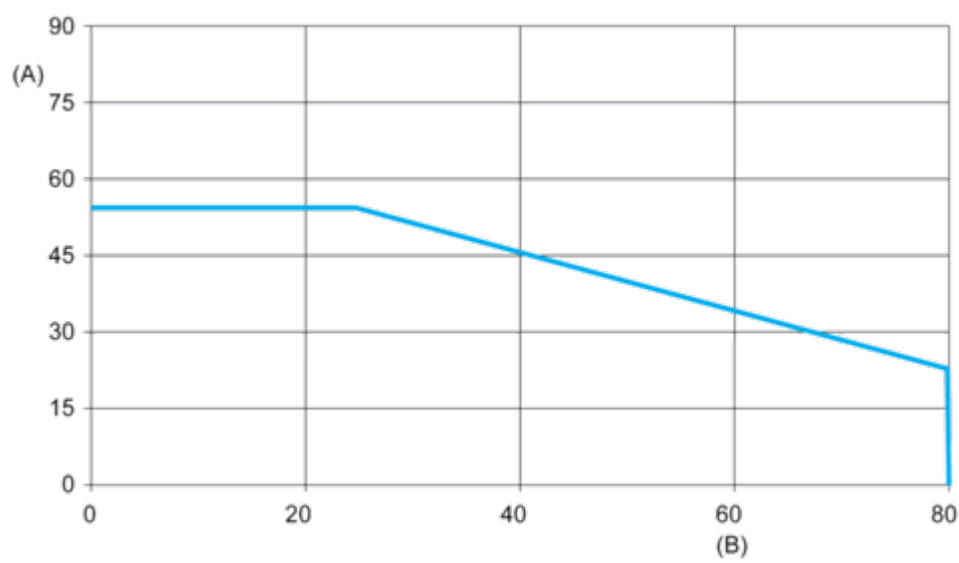
Dimensions



- (1) Top view
- (2) Side view
- (3) Front view

Performance Curves

Derating Curves



A : Load Current (Amperes)
B : Ambient Temperature (°C)