

# Product data sheet

Specifications



solid state relay - DIN rail mount -  
input 90-140Vac, output 24-280Vac,  
45A

SSM1A145F7

! Discontinued

! Discontinued on: Dec 2, 2020

! End-of-service on: Dec 31, 2020

## Main

Range of Product	Harmony Relay
Product or Component Type	Solid state relay
Device short name	SSM1
Number of phases	1 phase

## Complementary

Mounting Support	Symmetrical DIN rail
Line Rated Current	45 A
Output voltage	24...280 V AC
[Uc] control circuit voltage	90...140 V AC
contacts type and configuration	1 NO
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 mm², AWG 24...AWG 12) input Screw terminals 1 x 0.2...1 x 8.4 mm², 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	SCR output Zero voltage switching
load current	0.15...45 A
transient overvoltage	600 V
Surge current	625 A 16.6 ms
Maximum voltage drop	<1.6 V on-state
Maximum I²t for fusing	1620 A².s for 8.3 ms
Maximum leakage current	10 mA off-state
DV/dt	500 V/µs off-state at maximum voltage
Response time	10 ms (turn-on) 40 ms (turn-off)

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

Overvoltage category	III
Net Weight	1.049 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	UL 508 IEC 60950-1 CSA C22.2 No 14
Product Certifications	EAC UL CSA
marking	CE EAC CSA UL
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	22375-INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3606485441641
Returnability	No
Country of origin	MX

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.4 in (6 cm)
Package 1 Width	4.3 in (11 cm)
Package 1 Length	4.6 in (11.8 cm)
Package 1 Weight	18.2 oz (517 g)

## 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-CO<sub>2</sub> 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](#)

**Eu Rohs Directive**

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

**China Rohs Regulation**

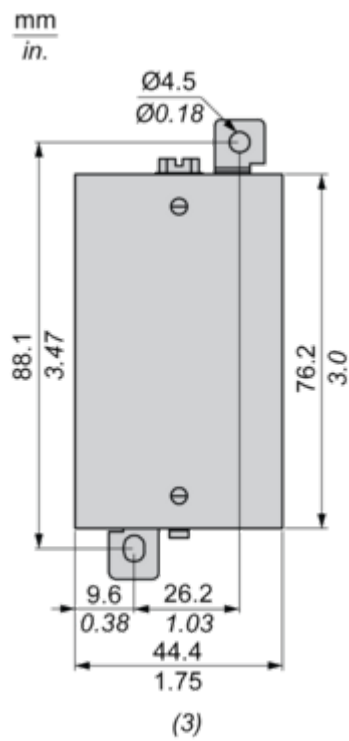
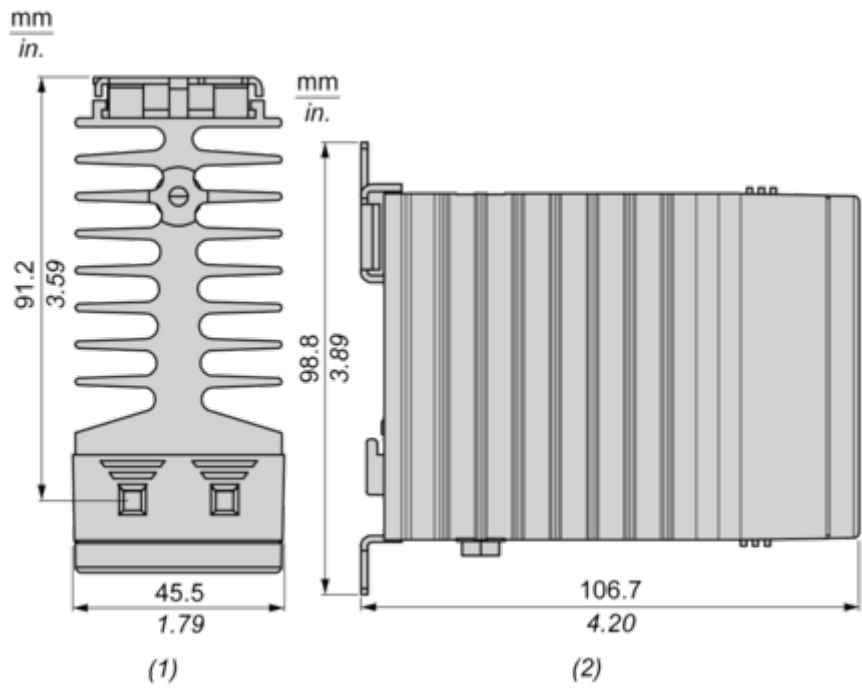
[China RoHS declaration](#)

**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](http://www.P65Warnings.ca.gov)

Dimensions Drawings

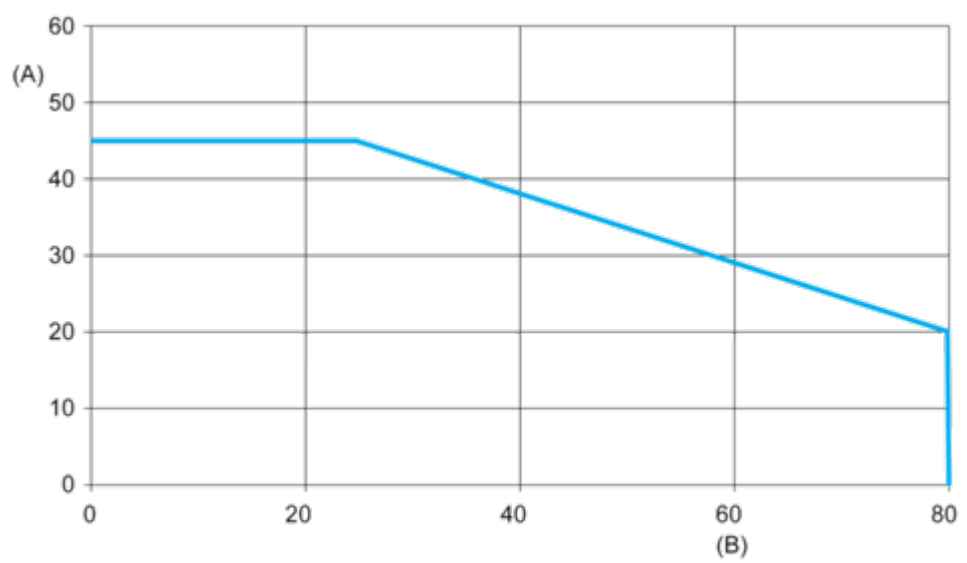
Dimensions



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

Performance Curves

Derating Curves



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