

Product data sheet

Specifications



Harmony, Solid state modular modular relay, 55 A, DIN rail mount, zero voltage switching, input 4...32 V DC, output 48...660 V AC

SSM1A455BD

⚠ Discontinued on: 31 October 2022

⚠ To be discontinued

Price* : 83.47 USD

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	4...32 V DC
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	4 V DC turn-on 1 V DC turn-off
Input current	14...17 mA
Solid state output type	SCR output Zero voltage switching
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

* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

DV/Dt	500 V/ μ s off-state at maximum voltage
Response time	0.5 cycle (turn-on) 0.5 cycle (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	UL 508 IEC 60950-1 CSA C22.2 No 14
Product Certifications	UL CSA EAC
Marking	UL EAC CE CSA
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	3606485441689
Returnability	No
Country of origin	MX

Packing Units

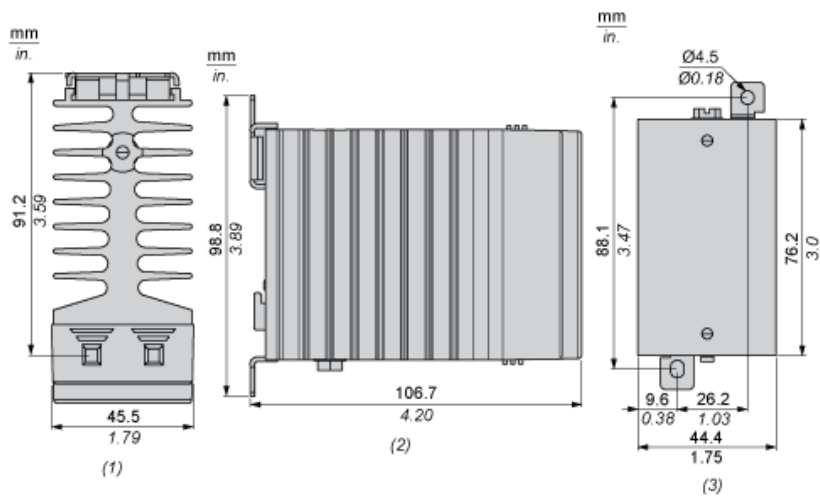
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.36 in (6.0 cm)
Package 1 Width	4.33 in (11.0 cm)
Package 1 Length	4.65 in (11.8 cm)
Package 1 Weight	18.24 oz (517.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	12
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	14.69 lb(US) (6.664 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
--------------------------	-----------------------

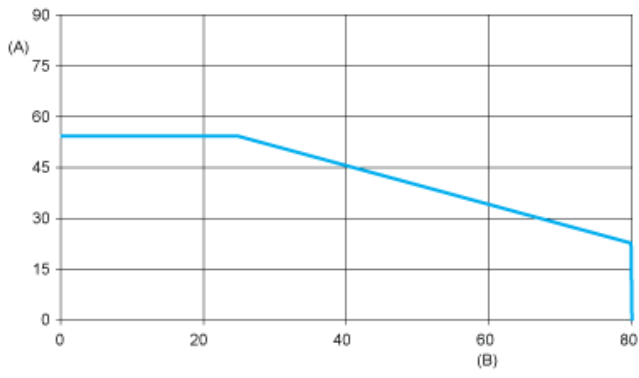
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions



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

Derating Curves



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

Recommended replacement(s)