

Product data sheet

Specifications



Harmony, Solid state modular relay, 20 A, DIN rail mount, zero voltage switching, input 4...32 V DC, output 24...280 V AC

SSM1A120BD

Discontinued on: 31 October 2022

To be discontinued

Price* : 47.55 USD

Main

Range of Product	Harmony Solid State Relays
Product or Component Type	Solid state relay up to 20 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	20 A
Output voltage	24...280 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 5.3 mm², AWG 24...AWG 10) input Screw terminals 1 x 0.2...1 x 5.3 mm², AWG 24...AWG 10) 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	8...12 mA
Solid state output type	SCR output Zero voltage switching
Load current	0.15...20 A
Transient overvoltage	600 V
Surge current	250 A 16.6 ms
Maximum voltage drop	<1.6 V on-state
Maximum I²t for fusing	260 A².s for 8.3 ms
Maximum leakage current	10 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/μs off-state at maximum voltage
Response time	0.5 cycle (turn-on) 0.5 cycle (turn-off)
Overvoltage category	III
Net Weight	0.62 lb(US) (0.28 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 IEC 60950-1 UL 508
Product Certifications	EAC UL CSA
Marking	CSA UL 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	22375-INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3606485441573
Returnability	No
Country of origin	MX

Packing Units

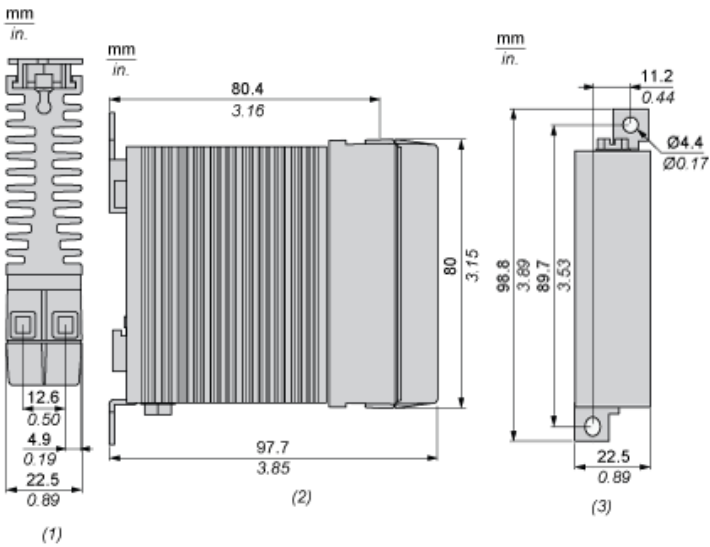
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.26 in (3.2 cm)
Package 1 Width	4.33 in (11.0 cm)
Package 1 Length	4.33 in (11.0 cm)
Package 1 Weight	10.34 oz (293.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	16.09 lb(US) (7.3 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
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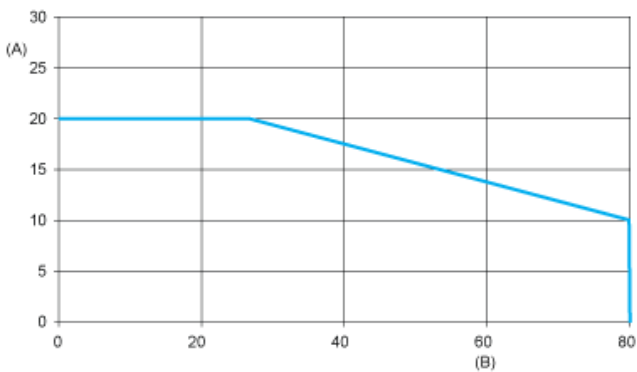
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
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

Dimensions



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

Derating Curves



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

Recommended replacement(s)

SSM1A120BD is replaced by:

1x



Harmony, Solid state relay, 20 A, DIN rail mount, zero voltage switching, input 4...32 V DC, output 48...600 V AC
SSD1A320BDC1