

# Product data sheet

## Characteristics

# SSD1A335BDC1

DIN rail mount relay, Harmony Solid State Relays, 35A, zeroVoltage switching, input 4...32V DC, output 48...600V AC



Product availability: Stock - Normally stocked in distribution facility

Price\*: 73.90 USD



### Main

Range of Product	Harmony Solid State Relays
Product or Component Type	Solid state relay up to 40 A
Device short name	SSD1
Number of Channels	1
Phase	1 phase
Product configuration type	Relay configuration
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Line Rated Current	35 A
Output switching mode	Zero voltage switching

### Complementary

Network Frequency	47...440 Hz
Rated duty	Uninterrupted
Output voltage	48...600 V AC
[Uc] control circuit voltage	4...32 V DC
Tightening torque	1.5...1.7 N.m for control input 13...15 lb.in for control input 1.5...1.7 N.m for load output 13...15 lb.in for load output
Connections - terminals	Screw terminals, clamping connection capacity:1...4 mm <sup>2</sup> , AWG 18...AWG 12 for input Screw terminals, clamping connection capacity:1...6 mm <sup>2</sup> , AWG 18...AWG 10 for output
Dielectric strength	4 KV AC for input/output circuit 4 KV AC for input or output to case
[Uimp] rated impulse withstand voltage	6 KV for input/output circuit 6 KV for input or output to case
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	For control voltage LED (green)
Minimum switching voltage	4 V DC turn-on
Maximum switching voltage	1 V DC turn-off

Input current limits	10...15 MA
Solid state output type	Zero voltage switching
Load current	0.15...35 A
Absolute maximum voltage	1200 V
Inrush current	1350 A at 60 Hz
Maximum voltage drop	<1.15 V on-state
Motor power kW	1.5 KW/2 Hp at 120 V AC 3.73 KW/5 Hp at 240 V AC 7.46 KW/10 Hp at 480 V AC
Electromagnetic compatibility	Electrostatic discharge 6 kV criteria A contact discharge conforming to IEC 61000-4-2 Electrostatic discharge 8 kV criteria A air discharge conforming to IEC 61000-4-2 Conducted RF disturbances 10 V, 0.15...80 MHz criteria A level 3 conforming- to IEC 61000-4-6 Electrical fast transient/burst immunity test 2 kV, 5/100 kHz criteria B output ports conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test 1 kV, 5/100 kHz criteria B input ports conforming to IEC 61000-4-4 Radiated radio-frequency electromagnetic field immunity test 10 V/m, 80 MHz...1 GHz criteria A conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immunity test 3 V/m, 1.4...2 GHz criteria A conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immunity test 1 V/m, 2...2.7 GHz criteria A conforming to IEC 61000-4-3 Surge immunity test 1 kV criteria A output ports line to line conforming- to IEC 61000-4-5 Surge immunity test 2 kV criteria B output ports line to earth conforming- to IEC 61000-4-5 Radiated emission environment B for DC input supply conforming to IEC 60947-4-3 Conducted emission environment B for DC input supply conforming to IEC 60947-4-3 Immunity to microbreaks and voltage drops 30 %, 500 ms criteria A conforming- to IEC 61000-4-11 Immunity to microbreaks and voltage drops 100 %, 20 ms criteria B conforming- to IEC 61000-4-11
Contact form	Form 5 semiconductor output DOL contactor
Maximum I <sup>2</sup> t for fusing	8320 A <sup>2</sup> .S for 10 ms 7593 A <sup>2</sup> .S for 8.33 ms
Maximum leakage current	1 MA off-state
DV/dt	500 V/μs off-state at maximum rated voltage
Response time	0.5 cycle (turn-on) 0.5 cycle (turn-off)
Power factor	0.5 with maximum load
Coordination type	Type 1 Type 2
Overvoltage category	III
Width	0.89 In (22.5 mm)
Height	3.67 In (93.2 mm)
Depth	4.59 In (116.5 mm)
Net Weight	0.66 Lb(US) (0.298 kg)
Device presentation	Complete product

## Environment

Flame retardance	V-0 conforming to UL 94
Vibration resistance	0.75 mm (f = 10...150 Hz) conforming to IEC 60068-2-6
Shock resistance	50 gn for 11 ms (peak acceleration) , longitudinal position conforming- to IEC 60068-2-27 30 gn for 11 ms (peak acceleration) , vertical position conforming to IEC 60068-2-27
Pollution degree	2
Standards	IEC 61373:class B: category 1 IEC 60947-4-3 IEC 62314 IEC 60950-1 CSA C22.2 No 14-13 UL 508

IP degree of protection	IP20
Ambient Air Temperature for Operation	-40...176 °F (-40...80 °C)
Ambient Air Temperature for Storage	-40...212 °F (-40...100 °C)

### Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
GTIN	3606489807894
Returnability	Yes
Country of origin	US

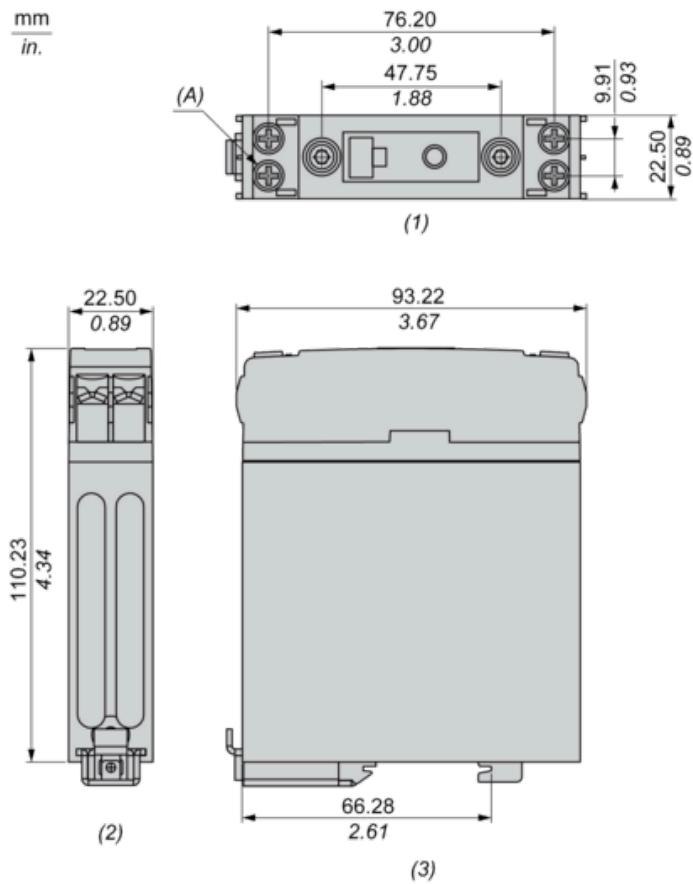
### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.98 In (2.500 cm)
Package 1 Width	3.66 In (9.300 cm)
Package 1 Length	5.51 In (14.000 cm)
Package 1 Weight	11.29 Oz (320.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	5.91 In (15.000 cm)
Package 2 Width	11.81 In (30.000 cm)
Package 2 Length	15.75 In (40.000 cm)
Package 2 Weight	17.86 Lb(US) (8.100 kg)

### Offer Sustainability

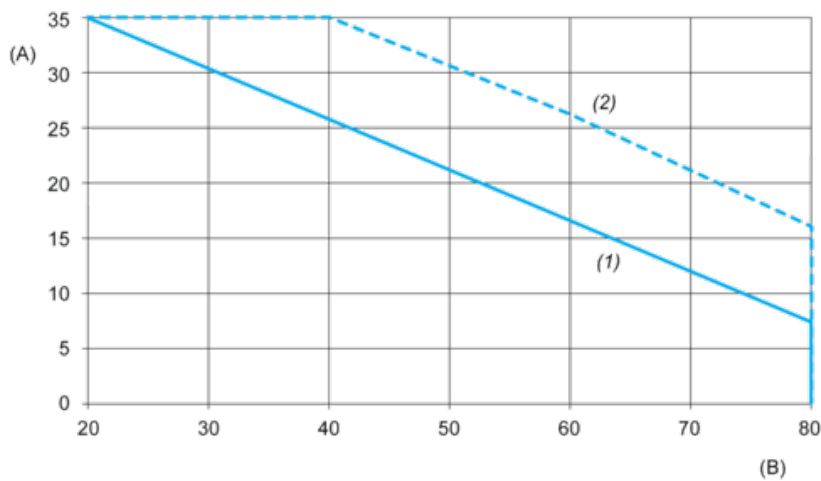
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov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

Dimensions



- (1) Front view
- (2) Top view
- (3) Side view
- (A) Screw M4 Stud (4 Places)

## 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 22.5 mm

Product Life Status : **Commercialised**