

# Product data sheet

Specifications



## DIN rail mount relay, Harmony Solid State Relays, 20A, DC switching, input 4 to 32V DC, output 1 to 150V DC

SSD1D520BDC1

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

**Price\*: 94.59 USD**

### Main

Range of Product	Harmony Solid State Relays
Product or Component Type	Modular DIN rail relay
Device short name	SSD1
Number of Channels	1
Number of phases	1 phase
Product configuration type	Relay configuration
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
rated current	20 A
Output switching mode	DC switching

### Complementary

Rated duty	Uninterrupted
Output voltage	1...150 V DC
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	3.75 kV AC for input/output circuit 3.75 kV AC for input or output to case
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)
pick-up voltage	4 V DC turn-on
drop-out voltage	1 V DC turn-off
input current range	11...15 mA
solid state switching type	DC switching
Load current	0.005...20 A

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

<b>Inrush current</b>	58 A for 10 ms
<b>Maximum voltage drop</b>	<0.68 V on-state
<b>motor controller rating</b>	0.25 kW/0.33 hp at 120 V DC
<b>Electromagnetic compatibility</b>	Electrostatic discharge 4 kV criteria A contact discharge conforming to IEC 61000-4-2 Electrostatic discharge 4 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 A output ports conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test 1 kV, 5/100 kHz criteria A 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 B 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
<b>device form designation</b>	Form 5 semiconductor output DOL contactor
<b>Resistance</b>	0.034 Ohm on-state
<b>Maximum leakage current</b>	0.1 mA off-state
<b>Response time</b>	75 µs (turn-on) 100 µs (turn-off)
<b>short circuit protection coordination</b>	Type 1 Type 2
<b>Overvoltage category</b>	III
<b>Width</b>	0.9 in (22.5 mm)
<b>Height</b>	3.7 in (93.2 mm)
<b>Depth</b>	4.6 in (116.5 mm)
<b>test button</b>	Without test button
<b>Net Weight</b>	0.657 lb(US) (0.298 kg)
<b>Device presentation</b>	Complete product

## Environment

<b>Flammability rating</b>	V-0 conforming to UL 94
<b>Vibration resistance</b>	0.75 mm (f = 10...150 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	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
<b>Pollution degree</b>	2
<b>Standards</b>	IEC 61373: class B: category 1 CSA C22.2 No 14-13 UL 508
<b>IP degree of protection</b>	IP20
<b>Ambient Air Temperature for Operation</b>	-40...176 °F (-40...80 °C)
<b>Ambient Air Temperature for Storage</b>	-40...212 °F (-40...100 °C)

## Ordering and shipping details

<b>Category</b>	US10CP222375
<b>Discount Schedule</b>	0CP2
<b>GTIN</b>	3606489807757
<b>Returnability</b>	Yes
<b>Country of origin</b>	US

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	1.10 in (2.8 cm)
<b>Package 1 Width</b>	3.86 in (9.8 cm)
<b>Package 1 Length</b>	5.51 in (14.0 cm)
<b>Package 1 Weight</b>	11.3 oz (320.0 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	24
<b>Package 2 Height</b>	5.91 in (15.0 cm)
<b>Package 2 Width</b>	11.81 in (30.0 cm)
<b>Package 2 Length</b>	15.75 in (40.0 cm)
<b>Package 2 Weight</b>	17.864 lb(US) (8.103 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-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 >](#)

[How we assess product sustainability >](#)

## Resource performance

✔ Take-Back No

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## Well-being performance

✔ Reach Free Of Svhc

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✔ Mercury Free

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✔ Rohs Exemption Information Yes

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Reach Regulation [REACH Declaration](#)

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

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China Rohs Regulation [China RoHS declaration](#)

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Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

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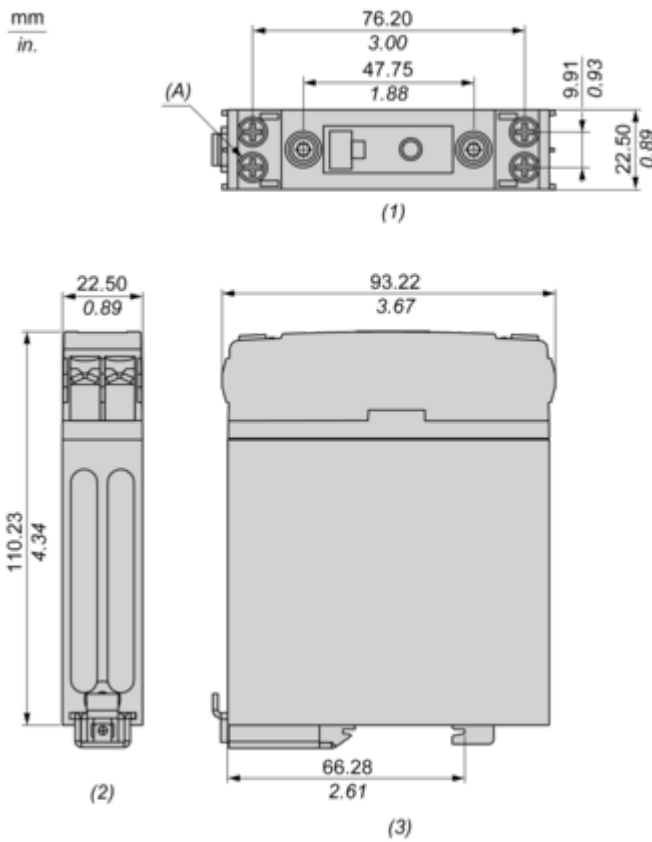
California Proposition 65 WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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Dimensions Drawings

Dimensions

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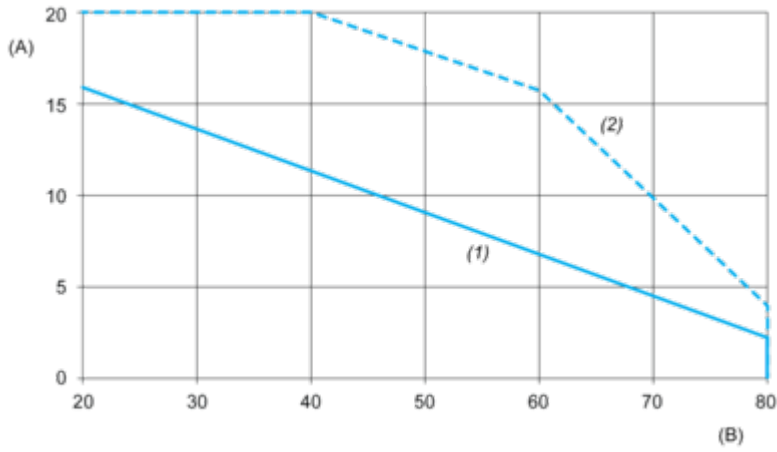


- (1) Front view
- (2) Top view
- (3) Side view
- (A) Screw M4 Stud (4 Places)

Performance Curves

Derating Curves

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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

Technical Illustration

Dimensions

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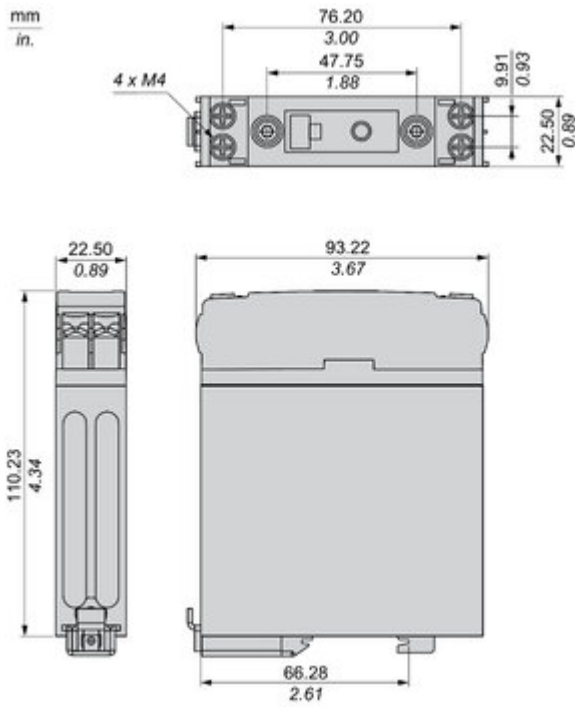


Image of product / Alternate images

Alternative

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