

# Product data sheet

Specifications



single phase relay, Harmony Solid State Relays, 40A, panel mount, DC switching, input 3.5 to 32V DC, output 1 to 150V DC

SSP1D440BD

**Product availability:** Stock - Normally stocked in distribution facility

## Main

Range of Product	Harmony Solid State Relays
Product or Component Type	Panel mount relay
Device short name	SSP1
Mounting Support	Panel
Number of phases	1 phase
Line Rated Current	40 A
Solid state output type	DC switching Mosfet output
Output switching mode	DC switching

## Complementary

test button	Without test button
[Uc] control circuit voltage	3.5...32 V DC
Minimum switching voltage	3.5 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Response time	0.1 ms (turn-on) 0.1 ms (turn-off)
Input current	10...15 mA
Output voltage	1...150 V DC
Load current	0.001...40 A
Surge current	106 A 10 ms
Co-ordination type	Type 2 - 20 A miniature circuit breaker (MCB) B Type 1 - 40 A miniature circuit breaker (MCB) B
Maximum leakage current	0.3 mA off-state
Maximum voltage drop	<2.1 V on-state
Insulation resistance	1000 MΩ at 500 V DC
Maximum capacitance	50 pF for input/output
Dielectric strength	2.5 kV AC for input/output 2.5 kV AC for input or output to case
[Uimp] rated impulse withstand voltage	2.5 kV output to case
Tightening torque	1.5...1.7 N.m for input 2...2.2 N.m for output

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

<b>Connections - terminals</b>	Screw terminals 0.2...3.3 mm <sup>2</sup> , AWG 24...AWG 12) with cable end input Screw terminals 0.5...5.26 mm <sup>2</sup> , AWG 20...AWG 10) with cable end output Screw terminals 0.2...3.3 mm <sup>2</sup> , AWG 24...AWG 12) without cable end input Screw terminals 0.5...8.26 mm <sup>2</sup> , AWG 20...AWG 8) without cable end output Forked type tag connectors 9.2 x 4 mm input Ring lugs 9.2 x 4 mm input Forked type tag connectors 11.7 x 4.5 mm output Ring lugs 11.7 x 4.5 mm output
<b>Thermal resistance</b>	0.22 °C/W junction to case
<b>LED indicator</b>	LED, green input
<b>IP degree of protection</b>	IP20
<b>Safety reliability data</b>	MTTFd = 1875.9 years B10d = 1731395
<b>Product Weight</b>	3.1 oz (89.2 g)
<b>Device presentation</b>	Complete product

## Environment

<b>Ambient Air Temperature for Operation</b>	-40...176 °F (-40...80 °C)
<b>Ambient Air Temperature for Storage</b>	-40...257 °F (-40...125 °C)
<b>Pollution degree</b>	2
<b>Overvoltage category</b>	III
<b>Product Certifications</b>	CSA CE UL EAC
<b>Marking</b>	CE EAC CSA UL
<b>Standards</b>	CSA C22.2 No 14-13 IEC 60950-1 UL 508 IEC 62314

## Ordering and shipping details

<b>Category</b>	US10CP222375
<b>Discount Schedule</b>	OCP2
<b>GTIN</b>	3606485441832
<b>Returnability</b>	Yes
<b>Country of origin</b>	MX

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	1.50 in (3.8 cm)
<b>Package 1 Width</b>	1.89 in (4.8 cm)
<b>Package 1 Length</b>	2.60 in (6.6 cm)
<b>Package weight(Lbs)</b>	3.7 oz (104 g)
<b>Unit Type of Package 2</b>	S01
<b>Number of Units in Package 2</b>	30

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<b>Package 2 Height</b>	5.91 in (15 cm)
<b>Package 2 Width</b>	5.91 in (15 cm)
<b>Package 2 Length</b>	15.75 in (40 cm)
<b>Package 2 Weight</b>	7.529 lb(US) (3.415 kg)

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Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Carbon footprint (kg CO2 eq, Total Life cycle)	<b>7624</b>
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Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	Yes
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<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
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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 <a href="#">www.P65Warnings.ca.gov</a>
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## Use Again

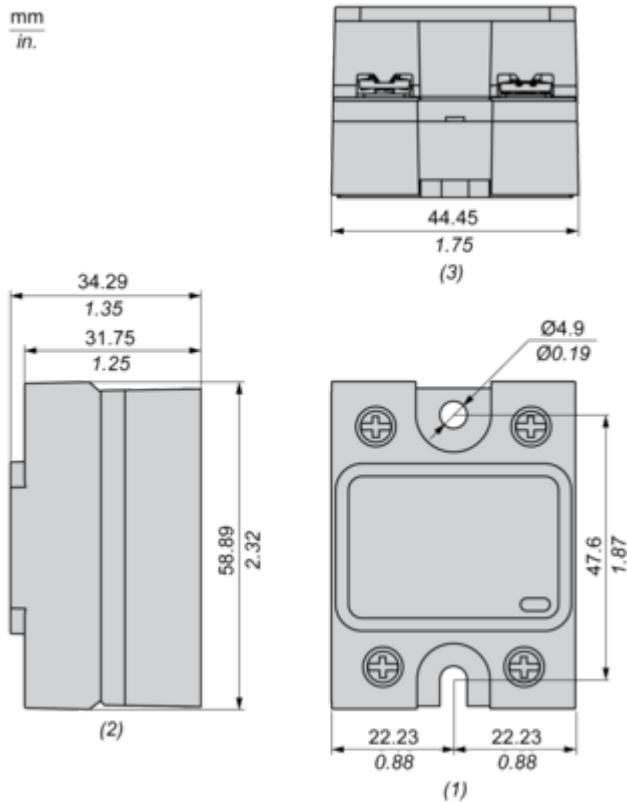
### Repack and remanufacture

Circularity Profile	<a href="#">End of Life Information</a>
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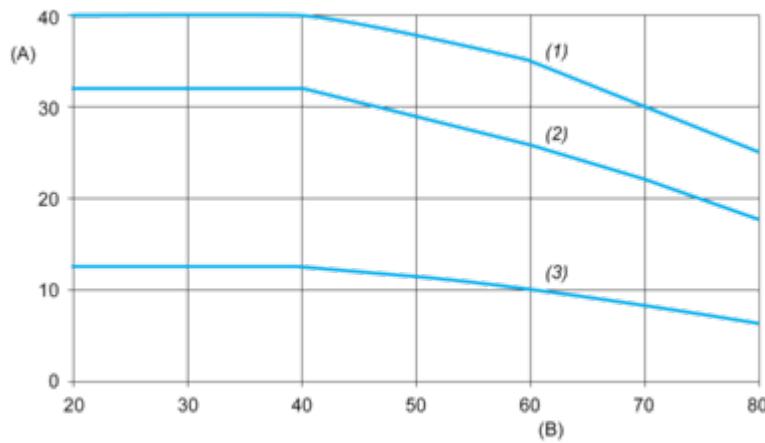
Take-back	No
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## Dimensions Drawings

## Dimensions



## Performance Curves

Derating Curves

**A** : Load Current (Amps)

**B** : Ambient Temperature (°C)

(1) For Heatsink SSRHD10

(2) For Heatsink SSRHP17

(3) No Heatsink

## Technical Illustration

## Dimensions

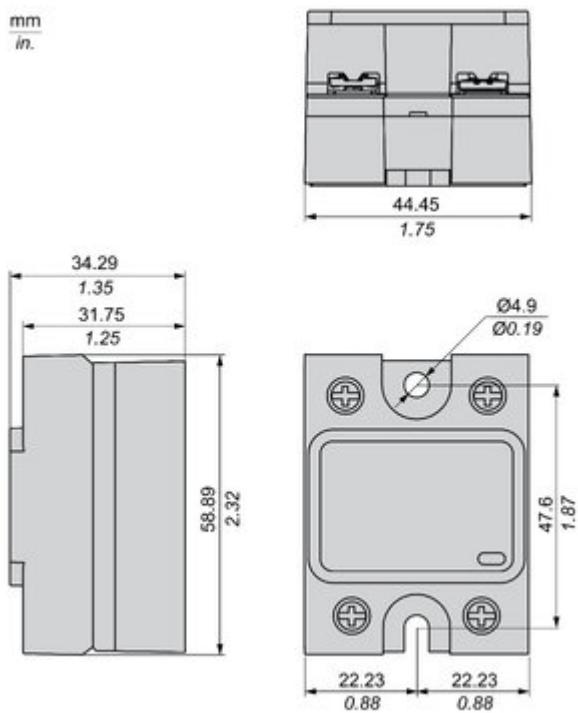
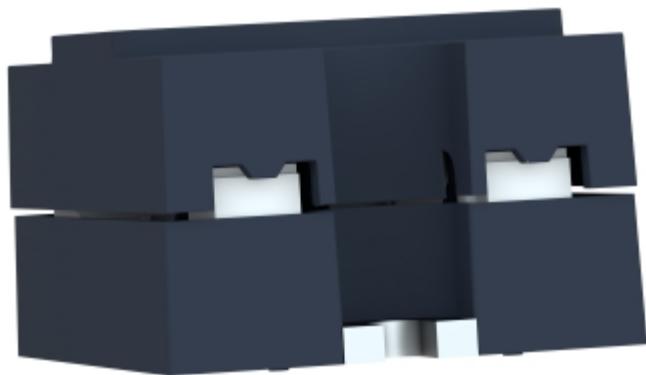
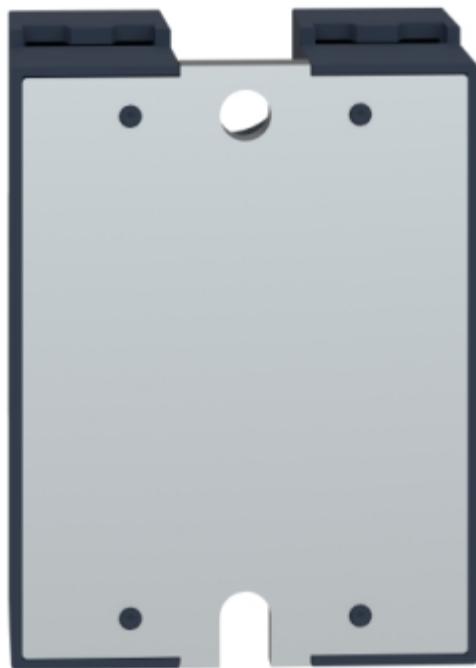


Image of product / Alternate images

Alternative

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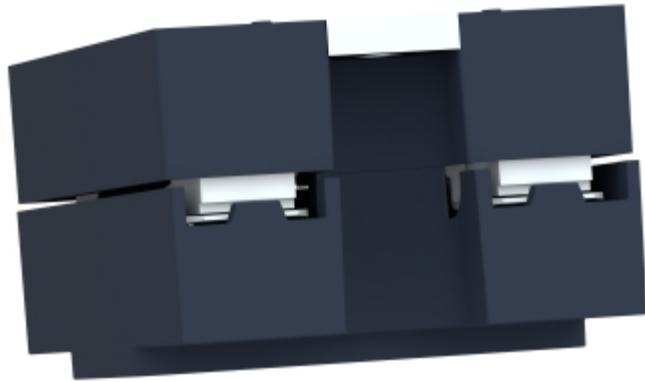


Image of product in real life situation

