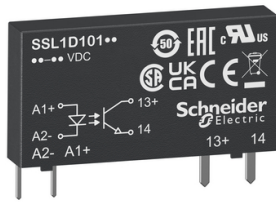


# Product data sheet

Specifications



plug in relay, Harmony Solid State Relays, 2A, zero voltage switching, input 15 to 30V DC, output 24 to 280V AC

SSL1A12BD

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

## Main

<b>Range of Product</b>	Harmony Solid State Relays
<b>Device short name</b>	SSL
<b>Product or Component Type</b>	Plug-in relay
<b>Phase</b>	1 phase
<b>[Uc] control circuit voltage</b>	15...30 V
<b>Output switching mode</b>	Zero voltage switching
<b>Short-circuit current</b>	5000 A
<b>Associated fuse rating</b>	2.5 A 250 V type 1
<b>Ui rated insulation voltage</b>	280 V
<b>Insulation resistance</b>	> 100 MOhm 500 V DC
<b>Electromagnetic compatibility</b>	<p>Electrostatic discharge - test level: 4 kV criteria B (contact discharge) conforming to IEC 61000-4-2</p> <p>Electrostatic discharge - test level: 8 kV criteria B (air discharge) conforming to IEC 61000-4-2</p> <p>Conducted RF disturbances - test level: 10 V criteria A (0.15...80 MHz) conforming to IEC 61000-4-6</p> <p>Electrical fast transient/burst immunity test - test level: 2 kV criteria B (5 kHz) conforming to IEC 61000-4-4</p> <p>Electrical fast transient/burst immunity test - test level: 1 kV criteria B (5 kHz) conforming to IEC 61000-4-4</p> <p>Surge immunity test - test level: 1 kV criteria B (line to line) conforming to IEC 61000-4-5</p> <p>Surge immunity test - test level: 2 kV criteria B (line to earth) conforming to IEC 61000-4-5</p> <p>Surge immunity test - test level: 1 kV criteria B (line to earth) conforming to IEC 61000-4-5</p> <p>Radiated emission - test level: 30...1000 Mhz conforming to IEC 60947-1</p> <p>Conducted emission - test level: 0.15...30 Mhz conforming to IEC 60947-1</p>
<b>[Uimp] rated impulse withstand voltage</b>	<p>4.0 kV for input to case IEC 62314</p> <p>4.0 kV for input/output circuit UL 508</p> <p>4.0 kV for input/output circuit IEC 62314</p> <p>4.0 kV output to case IEC 62314</p> <p>4.0 kV output to case</p> <p>4.0 kV for input to case UL 508</p> <p>4.0 kV output to case UL 508</p>

## Complementary

<b>Mounting Support</b>	Socket
<b>Line Rated Current</b>	2 A
<b>Output voltage</b>	24...280 V AC
<b>[Uc] control circuit voltage</b>	15...30 V DC

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

Capacitance unbalance	2.5 pF input/output
Minimum switching voltage	15 V DC turn-on
Maximum switching voltage	10 V DC turn-off
Input current	10 mA
Input impedance	2500 Ohm
Solid state output type	Zero voltage switching SCR output
Load current	0.07...2 A
Transient Overvoltage	600 V
Surge current	84 A 16.6 ms 80 A 20 ms
Maximum voltage drop	<1.5 V on-state
Maximum I <sup>2</sup> t for fusing	33 A <sup>2</sup> .s for 10 ms at 50 Hz 29 A <sup>2</sup> .s for 8.3 ms at 60 Hz
Maximum leakage current	4 mA off-state
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
Width	0.2 in (5 mm)
Height	1.1 in (28 mm)
Depth	0.6 in (15 mm)
Net Weight	0.0090 lb(US) (0.0041 kg)
Device presentation	Complete product

## Environment

Flame retardance	V0 conforming to UL 94
Dielectric strength	2500 V for input/output
pollution degree	2
Standards	IEC/EN 60947-4-3 IEC/EN 62314 UL 508 C22.2 No. 14
Product Certifications	cURus CSA EAC CE UKCA
Marking	CE
IP degree of protection	IP00
Ambient Air Temperature for Operation	-4...176 °F (-20...80 °C)
Ambient Air Temperature for Storage	-4...185 °F (-20...85 °C)

## Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2

<b>GTIN</b>	3606480579721
<b>Returnability</b>	Yes
<b>Country of origin</b>	CN

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	0.28 in (0.700 cm)
<b>Package 1 Width</b>	0.98 in (2.500 cm)
<b>Package 1 Length</b>	14.57 in (37.000 cm)
<b>Package 1 Weight</b>	0.176 oz (5.000 g)
<b>Unit Type of Package 2</b>	BB1
<b>Number of Units in Package 2</b>	12
<b>Package 2 Height</b>	0.28 in (0.700 cm)
<b>Package 2 Width</b>	0.98 in (2.500 cm)
<b>Package 2 Length</b>	14.57 in (37.000 cm)
<b>Package 2 Weight</b>	2.152 oz (61.000 g)
<b>Unit Type of Package 3</b>	S01
<b>Number of Units in Package 3</b>	1080
<b>Package 3 Height</b>	5.91 in (15.000 cm)
<b>Package 3 Width</b>	5.91 in (15.000 cm)
<b>Package 3 Length</b>	15.75 in (40.000 cm)
<b>Package 3 Weight</b>	12.531 lb(US) (5.684 kg)



## Environmental Data

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) **10**

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard **Yes**

Packaging without single use plastic **No**

[EU RoHS Directive](#) **Pro-active compliance (Product out of EU RoHS legal scope)**

REACH Regulation [REACH Declaration](#)

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)**

## Use Again

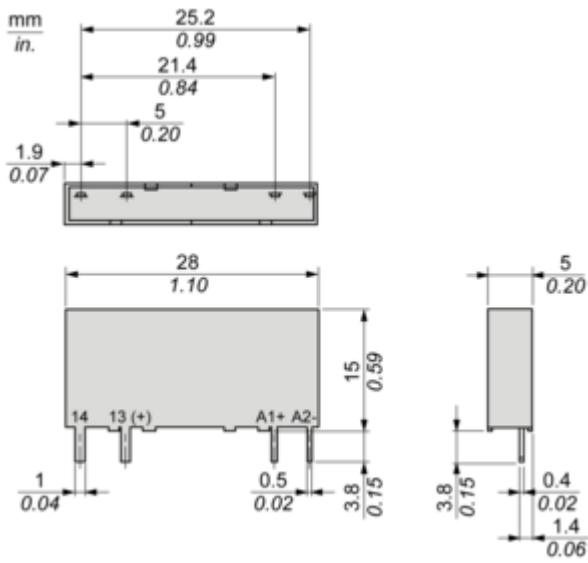
### Repack and remanufacture

Take-back **No**

Dimensions Drawings

Dimensions

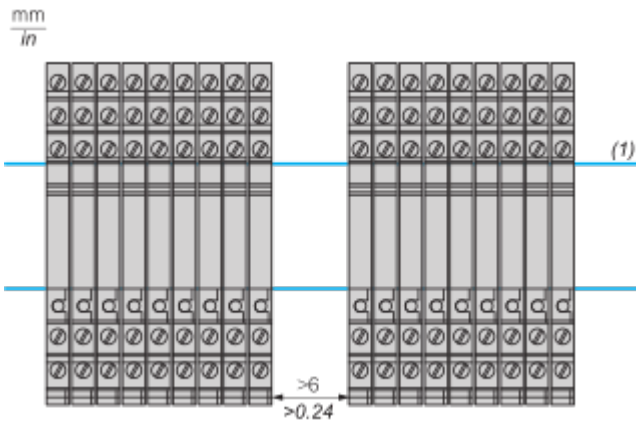
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Mounting and Clearance

Mounting

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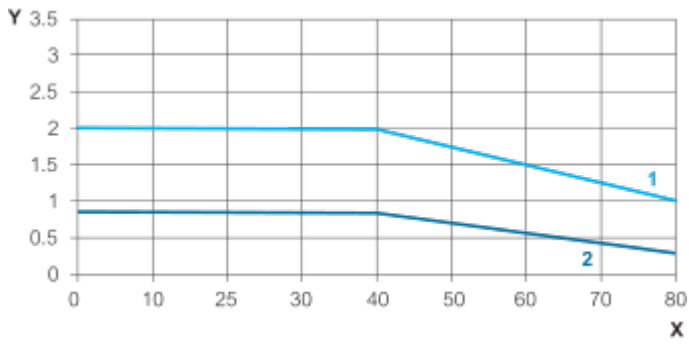


(1) : DIN Rail Mount

Performance Curves

Derating Curves

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X : Ambient Temperature (°C)

Y : Load Current (Amperes)

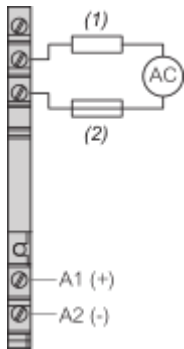
1 : Installed single unit, distance to adjacent components more than 6.2 mm

2 : Multiple units, no minimum spacing between components

Connections and Schema

Wiring

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- (1) Load
- (2) Fuse (Recommended 021602.5MXP Littelfuse)

Technical Illustration

Dimensions

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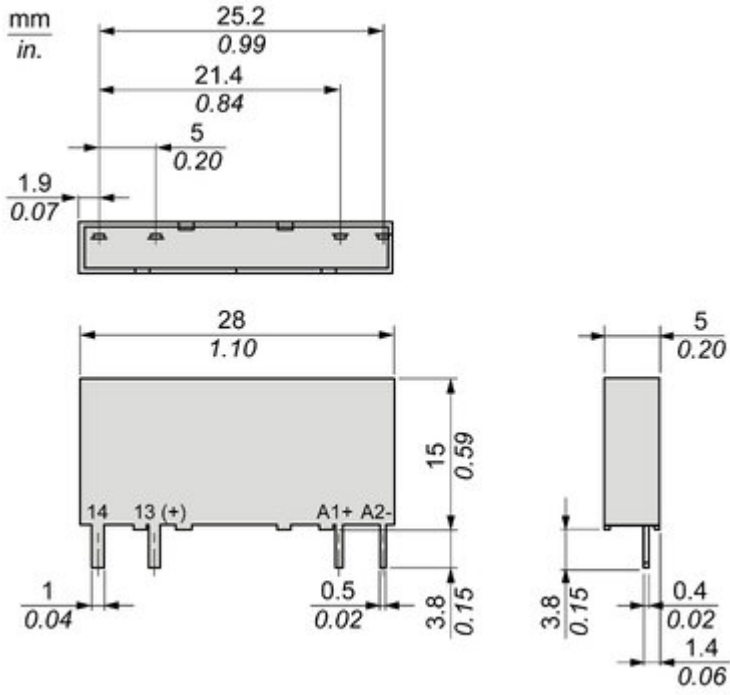
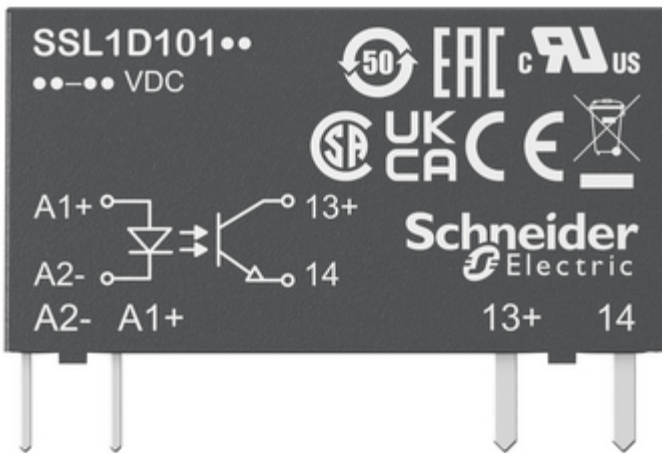
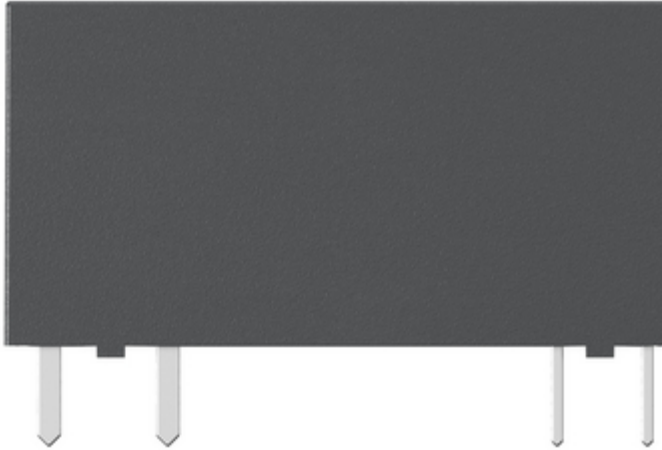


Image of product / Alternate images

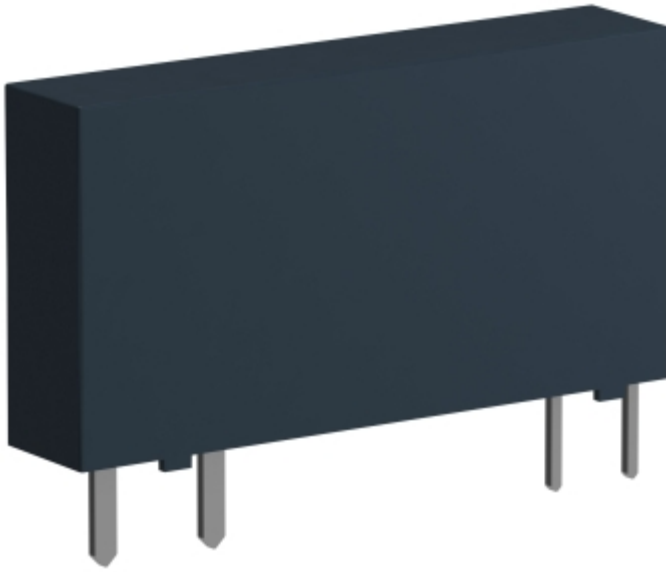
Alternative

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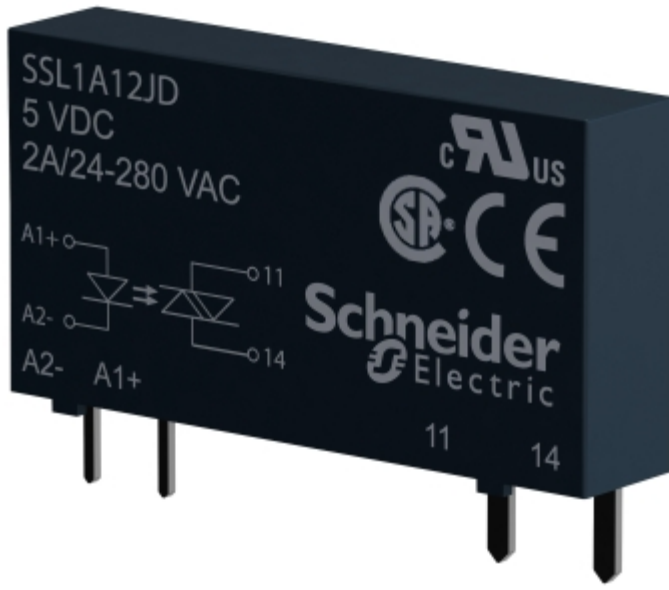


Image of product in real life situation

