Product data sheet

Specifications



pre-assembled relay, Harmony Solid State Relays, 2A, zeroVoltage switching, spring sockets, input 16...30V DC, output 24...250V AC

SSL1A12BDPR

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Harmony Solid State Relays
Device short name	SSL
Phase	1 phase
[Uc] control circuit voltage	16...30 V
Connections - Terminals	Spring terminals
Output switching mode	Zero voltage switching

Complementary

Mounting Support	Spring socket
Line Rated Current	2 A
Output voltage	24...250 V AC
[Uc] control circuit voltage	16...30 V DC
CLAMPING FORCE	10...40 N.m
Connections - terminals	Flexible cable with cable end, 0.2...1.5 mm² AWG 24...AWG 16) Solid cable with cable end, 0.2...1.5 mm² AWG 24...AWG 16)
Capacitance unbalance	1.5 pF input/output
Minimum switching voltage	16 V DC turn-on
Maximum switching voltage	5 V DC turn-off
Input impedance	3.43 kOhm
Solid state output type	Zero voltage switching SCR output
Load current	0.07…2 A
Transient Overvoltage	600 V AC
Surge current	120 A 16.6 ms 115 A 20 ms
Maximum voltage drop	<1.1 V on-state
Maximum I²t for fusing	285 A².s for 10 ms at 50 Hz 260 A².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

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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Width	0.2 in (6.2 mm)
Height	4.1 in (104.6 mm)
Depth	3.1 in (79.5 mm)
Product Weight	0.0628 lb(US) (0.0285 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 60950-1 IEC 61000 IEC 62314 IEC 61984 EN 61984
Product Certifications	UL CSA CE UL 508 CSA22.2 No. 14-10 GOST
Marking	CURus CSA CE EAC
IP degree of protection	IP20
Ambient Air Temperature for Operation	-4…158 °F (-20…70 °C)
Ambient Air Temperature for Storage	-4…185 °F (-20…85 °C)

Ordering and shipping details

Category	US10CP221127
Discount Schedule	0CP2
GTIN	3606489563073
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	3.150 in (8.000 cm)
Package 1 Width	0.276 in (0.700 cm)
Package 1 Length	4.134 in (10.500 cm)
Package weight(Lbs)	0.952 oz (27.000 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	30
Package 2 Height	3.740 in (9.500 cm)
Package 2 Width	4.331 in (11.000 cm)

Package 2 Length	7.874 in (20.000 cm)
Package 2 Weight	30.899 oz (876.000 g)
Unit Type of Package 3	S03
Number of Units in Package 3	60
Package 3 Height	11.811 in (30.000 cm)
Package 3 Width	11.811 in (30.000 cm)
Package 3 Length	15.748 in (40.000 cm)
Package 3 Weight	5.602 lb(US) (2.541 kg)

Contractual warranty

Warranty (in months)	18

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

Total lifecycle Carbon footprint	**11 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**0.6 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**10 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
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**

Use Longer

Lifetime extension

Repair	**No**

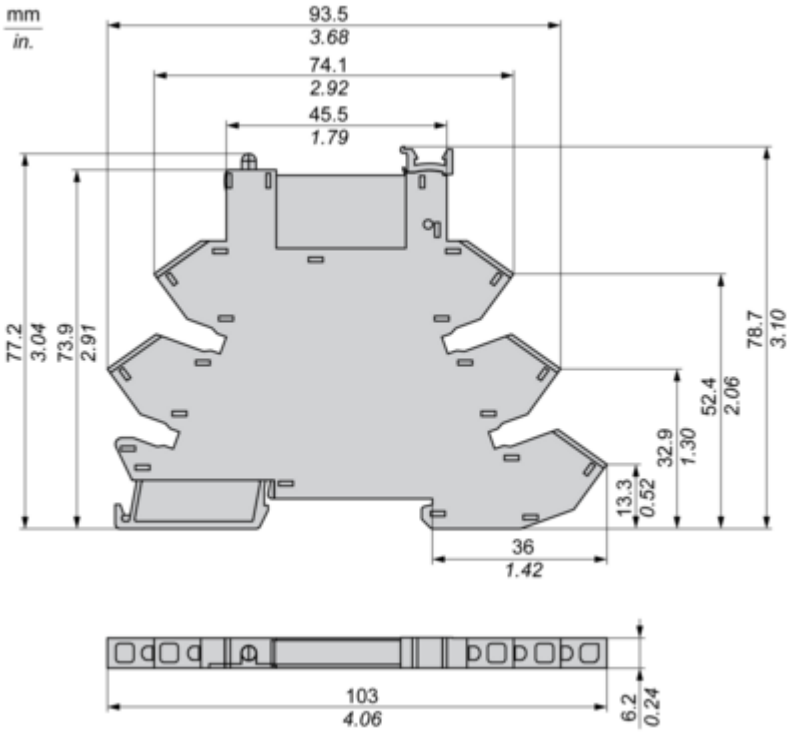
Use Again

Repack and remanufacture

Take-back	**No**

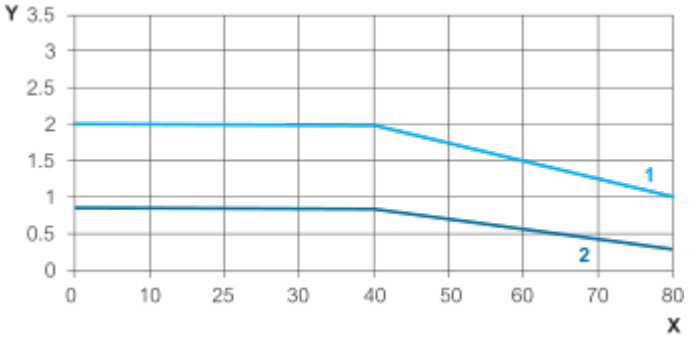
Dimensions Drawings

Dimensions



Performance Curves

Derating Curves



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

Technical Illustration

Dimensions

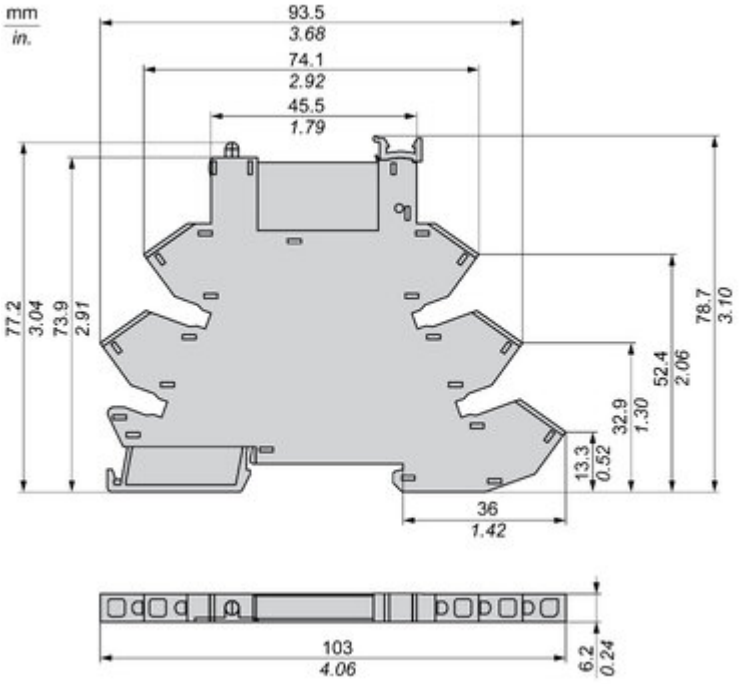
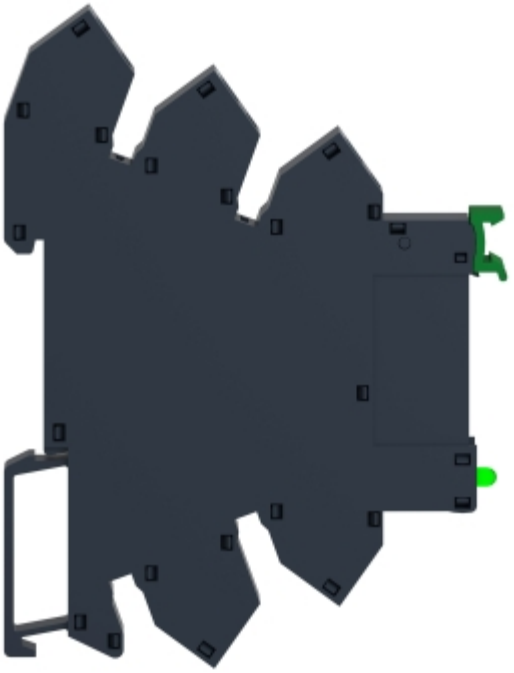


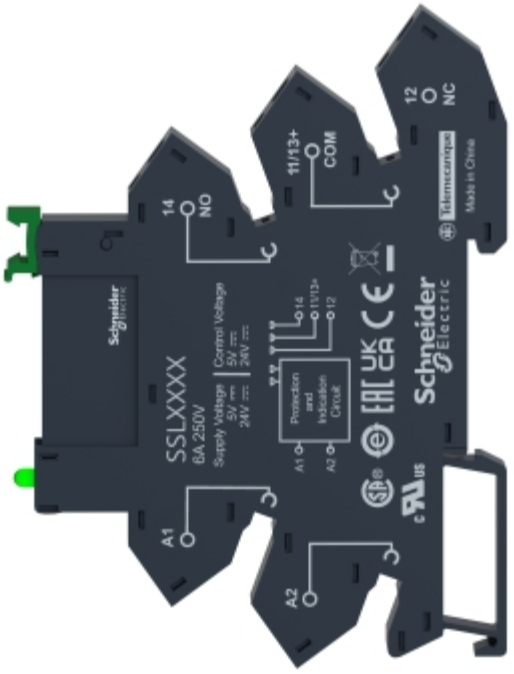
Image of product / Alternate images

Alternative








14
NO
11/13+
COM
12
NC
SSLXXXX
6A 250V
Control Voltage
5V
24V
Supply Voltage
5V
24V
Protection and Indication Circuit
A1
A2
Schneider Electric
Made in China



