

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

Main

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

Complementary

Mounting support	Spring socket
[In] 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, clamping capacity: 0.2...1.5 mm ² (AWG 24...AWG 16) Solid cable with cable end, clamping capacity: 0.2...1.5 mm ² (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 for 16.6 ms 115 A for 20 ms
Maximum voltage drop	<1.1 V on-state
Maximum I ² t for fusing	285 A ² .s for 10 ms at 50 Hz 260 A ² .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	6.2 mm

Height	104.6 mm
Depth	79.5 mm
Net weight	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	-20...70 °C
Ambient air temperature for storage	-20...85 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.000 cm
Package 1 Width	0.700 cm
Package 1 Length	10.500 cm
Package 1 Weight	27.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	30
Package 2 Height	9.500 cm
Package 2 Width	11.000 cm
Package 2 Length	20.000 cm
Package 2 Weight	876.000 g
Unit Type of Package 3	S03
Number of Units in Package 3	60
Package 3 Height	30.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	2.541 kg

Contractual warranty

Warranty (in months)

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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

Use Longer



Lifetime extension

Repair	No
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Use Again

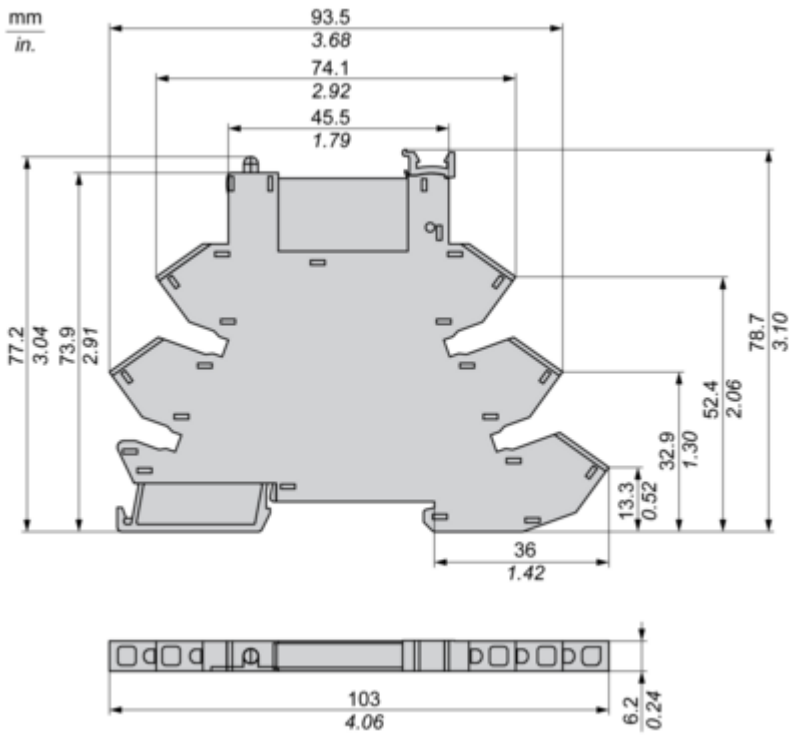


Repack and remanufacture

Take-back	No
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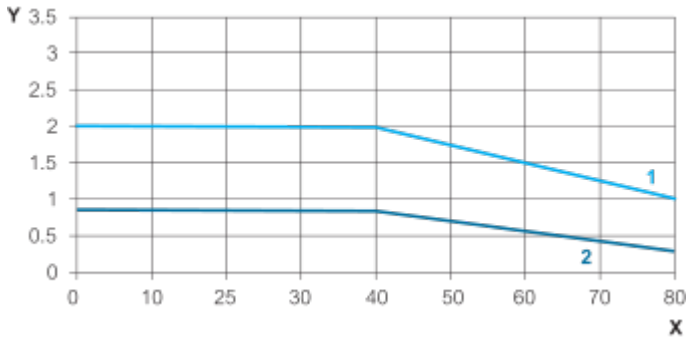
Dimensions Drawings

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

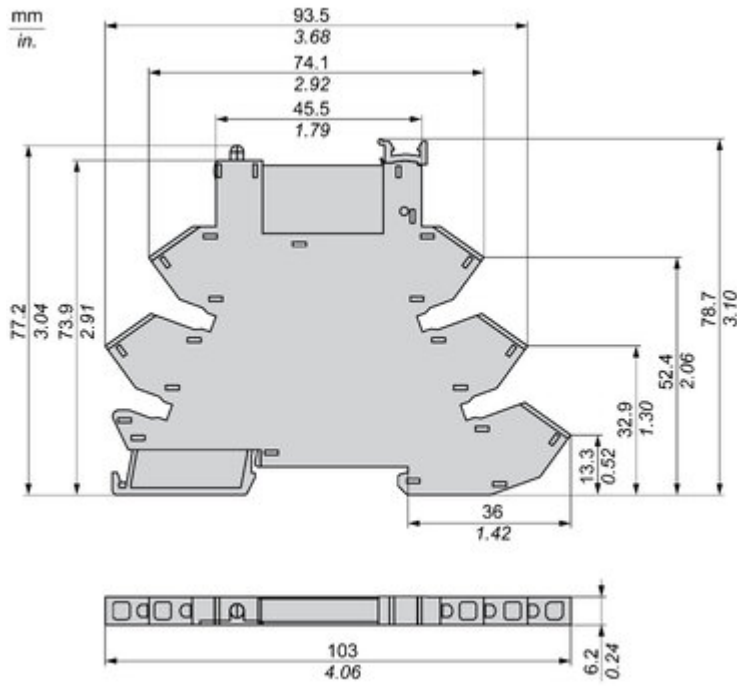


Image of product / Alternate images

Alternative



