SSL1A12BDPR

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





Main

Harmony Solid State Relays
Solid state relay up to 10 A
SSL
1 phase
Zero voltage switching

Complementary

[In] rated current 2 A [Uc] control circuit voltage 1630 V DC CLAMPING FORCE 1040 N.m Connections - terminals Flexible cable with cable end, clamping capacity: 0.21.5 mm² (AWG 24AWG 16) Solid cable with cable end, clamping capacity: 0.21.5 mm² (AWG 24AWG 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 0.072 A Tansient 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 Pt for fusing 285 A².S for 10 ms at 50 Hz 200 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 </th <th>Mounting support</th> <th>Spring socket</th>	Mounting support	Spring socket
CLAMPING FORCE 1040 N.m Flexible cable with cable end,clamping capacity: 0.21.5 mm² (AWG 24AWG 16) Solid cable with cable end,clamping capacity: 0.21.5 mm² (AWG 24AWG 16) Solid cable with cable end,clamping capacity: 0.21.5 mm² (AWG 24AWG 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 0.072 A Tansient Overvoltage 600 V AC Surge current 120 A for 16.6 ms 115 A for 20 ms Maximum voltage drop 4.1.1 V on-state Maximum let for fusing 285 A². S for 10 ms at 50 Hz 200 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-on) 0.5 cycle (turn-off) Overvoltage category III Width 6.2 mm Height 104.6 mm Depth 79.5 mm	[In] rated current	2 A
Flexible cable with cable end, clamping capacity: 0.21.5 mm² (AWG 24AWG 16) Solid cable with cable end, clamping capacity: 0.21.5 mm² (AWG 24AWG 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 0.072 A Tansient 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 l²t for fusing 285 A².S for 10 ms at 50 Hz 280 A².s for 8.3 ms at 60 Hz Maximum leakage current 4 m A 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	[Uc] control circuit voltage	1630 V DC
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Maximum switching voltage 5 V DC turn-off Input impedance 3.43 kOhm Solid state output type Zero voltage switching SCR output Load current 0.072 A Tansient 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 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 Width 6.2 mm Height 104.6 mm Depth 79.5 mm	Capacitance unbalance	1.5 pF input/output
Input impedance 3.43 kOhm Solid state output type Zero voltage switching SCR output Load current 0.072 A Tansient 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 l²t 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 Width 6.2 mm Height 104.6 mm Depth 79.5 mm	Minimum switching voltage	16 V DC turn-on
Solid state output type Zero voltage switching SCR output Load current 0.072 A Tansient Overvoltage 600 V AC Surge current 120 A for 16.6 ms 115 A for 20 ms Maximum voltage drop 4.1.1 V on-state Maximum ²t 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 Width 6.2 mm Height 104.6 mm Depth 79.5 mm	Maximum switching voltage	5 V DC turn-off
SCR output Load current 0.072 A Tansient 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	Input impedance	3.43 kOhm
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Maximum I²t for fusing285 A².S for 10 ms at 50 Hz 260 A².s for 8.3 ms at 60 HzMaximum leakage current4 mA off-stateDV/dt500 V/µs off-state at maximum voltageResponse time0.5 cycle (turn-on) 0.5 cycle (turn-off)Overvoltage categoryIIIWidth6.2 mmHeight104.6 mmDepth79.5 mm	Surge current	1=+ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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 Width 6.2 mm Height 104.6 mm Depth 79.5 mm	Maximum voltage drop	<1.1 V on-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	Maximum I²t for fusing	
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	Maximum leakage current	4 mA off-state
Overvoltage category III Width 6.2 mm Height 104.6 mm Depth 79.5 mm	DV/dt	500 V/µs off-state at maximum voltage
Width 6.2 mm Height 104.6 mm Depth 79.5 mm	Response time	
Height 104.6 mm Depth 79.5 mm	Overvoltage category	III
Depth 79.5 mm	Width	6.2 mm
	Height	104.6 mm
Net weight 0.0285 kg	Depth	79.5 mm
	Net weight	0.0285 kg

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not inherent for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the dourn and restring of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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[RETURN]CSA[RETURN]CE[RETURN]UL 508[RETURN]CSA22.2 No. 14-10[RETURN]GOST
Marking	CURus CSA CE EAC
IP degree of protection	IP20
Ambient air temperature for operation	-2070 °C
Ambient air temperature for storage	-2085 °C

Packing Units

. doming office	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	10.04 cm
Package 1 Width	0.625 cm
Package 1 Length	7.9 cm
Package 1 Weight	33.0 g
Unit Type of Package 2	BB1
Number of Units in Package 2	30
Package 2 Height	9.8 cm
Package 2 Width	25.0 cm
Package 2 Length	29.6 cm
Package 2 Weight	1.061 kg
Unit Type of Package 3	S03
Number of Units in Package 3	60
Package 3 Height	30.0 cm
Package 3 Width	30.0 cm
Package 3 Length	40.0 cm
Package 3 Weight	2.762 kg

Offer Sustainability

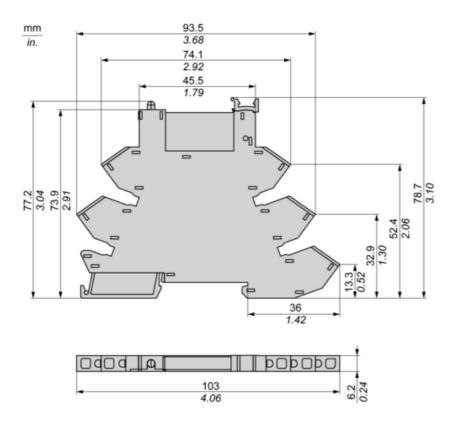
Green Premium product
☑ REACh Declaration
Yes
Pro-active compliance (Product out of EU RoHS legal scope)
Yes
☑ China RoHS Declaration
Ğ Yes
Product Environmental Profile
[™] End Of Life Information
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

Warranty 18 Months

SSL1A12BDPR

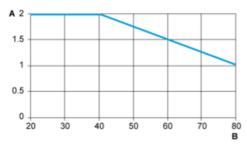
Dimensions



Product data sheet Performance Curves

SSL1A12BDPR

Derating Curves



A: Load Current (Amperes)

B : Ambient Temperature (°C)