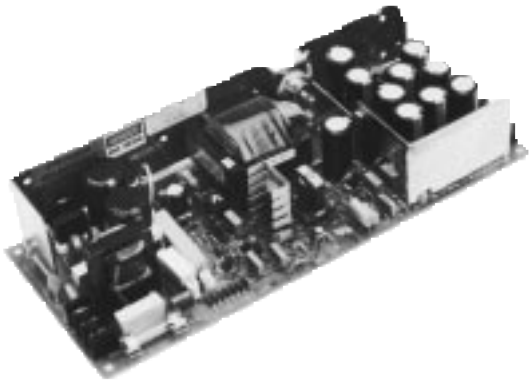
ARTESYN TECHNOLOGIES

SL120 and SL220 SERIES

Single output

SL120: For new design-ins see the NFS110 Series instead
SL220: For new design-ins see the NFS200 and LX200 Series instead



- **115/230 VAC input**
- **UL, CSA and (VDE approved - SL120 only)**
- **Short circuit protection**
- **Floating output**
- **20ms hold-up time min.**

This series of 100 Watt to 220 Watt single output switchers use an advanced circuit topology providing superior performance at low cost. Smaller and lighter than equivalent linear supplies, they are available in 5V and 24V output versions. The floating outputs can be referenced as either positive or negative. The SL120 model is UL, CSA and VDE approved. Also, selected models incorporate remote sense. SL120/220 Series power supplies are suitable for a wide variety of applications, including front end power systems, general industrial and telecom equipment.

[2 YEAR WARRANTY]

CE (LVD) **SL120 only**

SPECIFICATION

All specifications are typical at nominal input, full load at 25°C unless otherwise stated

OUTPUT SPECIFICATIONS		
Output voltage adjustability	5V Models 24V Models	4.5V to 5.5V 18V to 26V
Line regulation	LL to HL, FL	±0.2%
Load regulation	60% FL, ±40% SL120 SL220	 ±2.0% ±1.0%
Overshoot/undershoot	At turn-on	None
Transient response	SL120: +5V (12A to 20A) SL220: +5V (10A to 20A)	±300mV, 1ms recovery ±100mV, 1ms recovery
Temperature coefficient	SL120, all outputs SL220, all outputs	±0.03%/°C ±0.05%/°C
Overvoltage protection	5V output	6.25 ±0.75V
Output power limit	SL120 SL220	130W min. 260W min.
Short circuit protection		Yes
INPUT SPECIFICATIONS		
Input voltage range	User Selectable	85 to 132VAC 170 to 264VAC
Input frequency range		47Hz to 440Hz
Maximum input surge current	SL120: 230VAC, cold start SL220: 230VAC, cold start	22A 74A
Safety ground leakage current	230VAC Input, 50Hz	0.7mA

GENERAL SPECIFICATIONS		
Hold-up Time	Low line, full load SL120, 110VAC SL120, 230VAC SL220, 110VAC SL220, 230VAC	 36ms 36ms 20ms 20ms
Efficiency		65%, max.
Isolation voltage	SL220 Input/Output SL220 Input/Chassis SL120 Input/Output SL120 Input/Chassis	1500VAC 1500VAC 3750VAC 1500VAC
Approvals and standards	Safety: SL120 series	VDE0805, EN60950, UL478 CSA bulletin No. 1402C
Weight	SL120 SL220	1.2kg (42.4oz) 2.3kg (81.2oz)
MTBF	SL120 SL220	25,000 hours min. 50,000 hours min.
ENVIRONMENTAL SPECIFICATIONS		
Thermal performance	Operating, See Note 8 Non-operating	0°C to +70°C –40°C to +85°C
Relative humidity	Non-condensing	5% to 80% RH
Altitude	Operating Non-operating	10,000 feet max. 30,000 feet max.

100 to 220 Watt
AC/DC user-selectable input switch mode power supplies

OUTPUT POWER	OUTPUT (1) VOLTAGE	OUTPUT (2) ADJ. RANGE	REGULATION (3)		NOISE PK-PK	MODEL NUMBER
			LINE (4)	LOAD (5)		
100W	5V@20A	4.5 to 5.5V	±0.2%	±2.0%	±1.0%	SL120-4605
220W	5V@44A	4.5 to 5.5V	±0.2%	±1.0%	±1.0%	SL220-4605 (6)
220W	24V@9A	18 to 26V	±0.2%	±1.0%	±1.0%	SL220-4624 (6)

Notes

1 Peak current in excess of the maximum indicated rating may be available on some outputs. However, this will effect output regulation. Consult factory for details.
2 Other output voltage versions available. Consult factory for details.
3 20% of rated output loading is required to ensure operation within specified regulation limits.
4 Measured from low line to high line at full load.
5 Measured at 60% full load, ±40%.
6 The SL220-4605 offers an auxiliary 24V output, rated at 2A on pin 7. The SL220-4624 offers an auxiliary 48V output, rated at 1A on pin 7.
7 Output sense will compensate for up to 3VDC load line drop. The output current limit increases with output voltage. Care must be taken not to exceed the maximum output power capability of the power supply.
8 Derate linearly from rated power at 50°C to half rated power at 70°C.
9 This product is only for inclusion by professional installers within other equipment and must not be operated as a stand alone product.

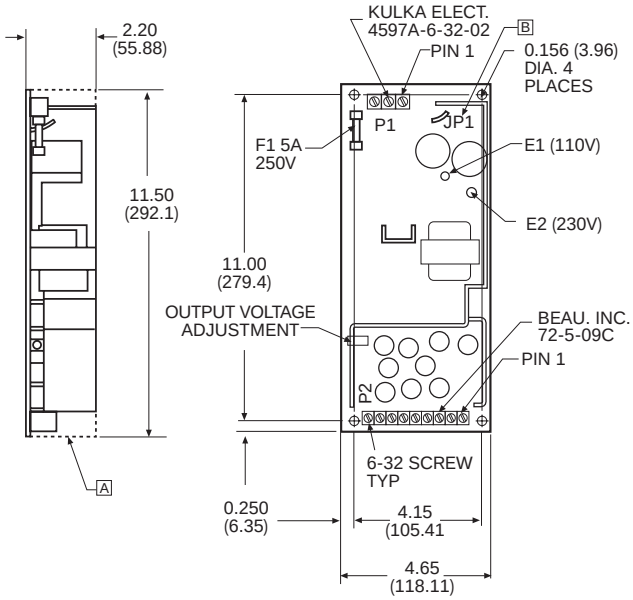
PIN CONNECTIONS	
P1	SL220
Pin 1	AC Live
Pin 2	AC Ground
Pin 3	AC Neutral
P2	
Pin 1	DC Output
Pin 2	DC Output
Pin 3	DC Output
Pin 4	Return
Pin 5	Return
Pin 6	Return
Pin 7	Auxiliary Output (6)
Pin 8	N/C
Pin 9	N/C
Pin 10	+Remote Sense (7)
Pin 11	–Remote Sense (7)

PIN CONNECTIONS	
P1	SL120
Term 1	AC Ground
Term 2	AC Neutral
Term 3	AC Live
P2	
Term 1	DC Output
Term 2	DC Output
Term 3	DC Output
Term 4	Return
Term 5	Return
Term 6	Return
Term 7	N/C
Term 8	+Remote Sense (7)
Term 9	–Remote Sense (7)

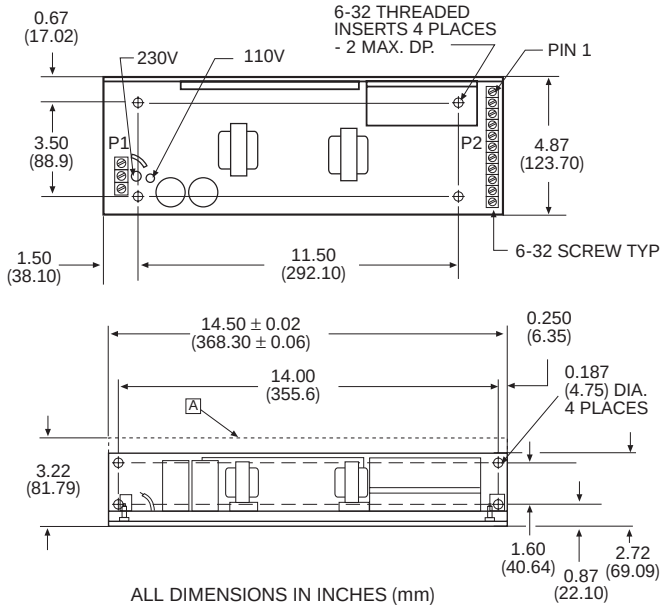
Mechanical notes

A Dashed line indicates minimum clearance.
B Connect JP1 to either E1 (110V) or E2 (220V) as required.

SL120



SL220



ALL DIMENSIONS IN INCHES (mm)

International Safety Standard Approvals: SL120-4605 only

VDE0805/EN60950 File No. 10401-3336-1006, Licence No. 4345

UL478 Reg. File No. E131987

CSA Bulletin No. 1402C, File No. LR41062C