

# 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 ]

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

OUTPUT SPECIFICATION	ONS			
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)	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 sta SL220: 230VAC, cold sta	art 22A art 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/Chass SL120 Input/Output SL120 Input/Chass	is 1500VAC t 3750VAC		
Approvals and standards	Safety: SL120 serie	s VDE0805, EN60950, UL478 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 Not Non-operating	e 8 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	OUTPUT <sup>(1)</sup>	OUTPUT <sup>(2)</sup>	REGUL	ATION <sup>(3)</sup>	NOISE	MODEL NUMBER
POWER	VOLTAGE	ADJ. RANGE	LINE (4)	LOAD (5)	PK-PK	WODEL NOWBER
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 <sup>(6)</sup>
220W	24V@9A	18 to 26V	±0.2%	±1.0%	±1.0%	SL220-4624 <sup>(6)</sup>

#### Notes

- 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.
- Other output voltage versions available. Consult factory for details.
- 20% of rated output loading is required to ensure operation within specified regulation limits.
- Measured from low line to high line at full load.
- Measured at 60% full load, ±40%.
- 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
- 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.

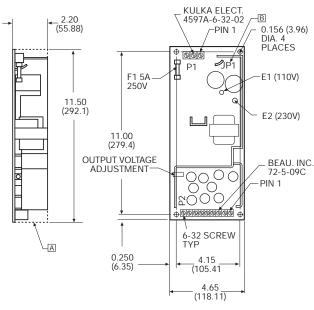
  Derate linearly from rated power at 50°C to half rated power at 70°C.
- This product is only for inclusion by professional installers within other equipment and must not be operated as a stand alone product.

PIN CONNECTIONS		PIN CONNECTIONS		
P1	SL220	P1	SL120	
Pin 1	AC Live	Term 1	AC Ground	
Pin 2	AC Ground	Term 2	AC Neutral	
Pin 3	AC Neutral	Term 3	AC Live	
P2		P2		
Pin 1	DC Output	Term 1	DC Output	
Pin 2	DC Output	Term 2	DC Output	
Pin 3	DC Output	Term 3	DC Output	
Pin 4	Return	Term 4	Return	
Pin 5	Return	Term 5	Return	
Pin 6	Return	Term 6	Return	
Pin 7	Auxiliary Output (6)	Term 7	N/C	
Pin 8	N/C	Term 8	+Remote Sense (7)	
Pin 9	N/C	Term 9	-Remote Sense (7)	
Pin 10	+Remote Sense (7)		1	
Pin 11	-Remote Sense (7)			

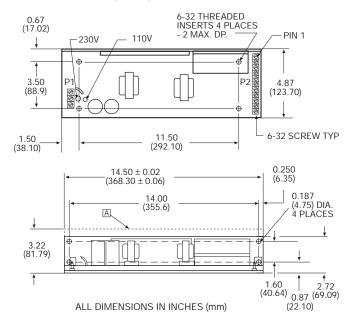
#### Mechanical notes

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

## **SL120**



### **SL220**



#### International Safety Standard Approvals: SL120-4605 only



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



**TI** UL478 Reg. File No. E131987



CSA Bulletin No. 1402C, File No. LR41062C



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