



Medical



Industrial

### FEATURES AND BENEFITS

Small Size of 2" X 4" X 1.2"	UL/CSA/IEC/IEC60601-1, IEC62368-1 Approved
For 1U Applications	2 x MOPP Isolation
85W Convection Cooled	Meets 4th Edition/Heavy Industrial EMC
125W With 200 LFM Airflow	-20°C To 70°C Operating Temperature Range
Certified to 90-264 VAC	3 Years Warranty



### MODEL SELECTION

Model Number	Volts	Output Current Convection Cooled	Output Current (200 LFM) (Total Power)	Ripple & Noise*	Total Regulation	OVP Threshold
SLB125S12x	12V	7.1A	9.8A (118 Watts)	0.5%RMS, 1.5% pk-pk	±2%	14.0 ± 1.1V
SLB125S15x	15V	5.6A	7.9A (118 Watts)	0.5%RMS, 1% pk-pk	±2%	18.0 ± 1.5V
SLB125S18x	18V	4.7A	6.5A (125 Watts)	0.5%RMS, 1% pk-pk	±2%	21.0V± 3.0V
SLB125S24x	24V	3.6A	5.2A (125 Watts)	0.5%RMS, 1% pk-pk	±2%	28.0 ± 4.0V
SLB125S36x	36V	2.4A	3.5A (125 Watts)	0.5%RMS, 1% pk-pk	±2%	40.0 ± 4.0V
SLB125S48x	48V	1.8A	2.1A (125 Watts)	0.5%RMS, 1% pk-pk	±2%	55.0 ± 4.0V
SLB125S56x	56V	1.5A	2.2A (125 Watts)	0.5%RMS, 1% pk-pk	±2%	60.0 ± 4.0V

Notes: Replace the "x" at the end of the model number with "C" for class II (ungrounded) input, or replace with "K" for class I (grounded) input.

### INPUT

AC Input Voltage	90-264VAC, Single phase
AC Input Current	115VAC: 2.0A, 230VAC: 1.0A
Inrush Current	70A maximum @ 25C
Input Fuse	F2: 3.15A, 250VAC Fuse provided on all models
Earth Leakage Current	<500uA @ 264VAC, 60Hz input, NC
AC Input Frequency	47-63Hz



### EFFICIENCY

Model Number	Typical	Measured @ 25°C
SLB125S12x, SLB125S15x	89% @ 230VAC, Full load	86.5% @ 115VAC, Full load
SLB125S18x	89% @ 230VAC, Full load	87% @ 115VAC, Full load
SLB125S24x, SLB125S36x	89% @ 230VAC, Full load	87% @ 115VAC, Full load
SLB125S48x, SLB125S56x	90% @ 230VAC, Full load	88% @ 115VAC, Full load

### OUTPUT

Hold-up Time	16ms minimum from loss of AC input at 115VAC	
Turn On Time	<2 seconds @115VAC (<3s for 12V output)	
Output Power	Max of 85 Watts for convection cooled Max of 125 Watts for fan cooled	
Ripple and Noise	0.5% RMS, 1% pk-pk for all models	20 MHz Bandwidth, differential mode Measured with noise probe directly across output terminals, and load terminated with 0.1µF ceramic and 10µF low ESR capacitors
Transient Response	500µs typ. response time for return to within 0.5% of final value for a 50% load change, $\Delta i/\Delta t < 0.2A/\mu s$ Max voltage deviation is 3.5%	Measured @ 25°C
Minimum Load	No minimum load is required	
Total Regulation	±2% for all models	Total regulation is the maximum deviation from nominal voltage for all loading conditions
Cooling	Convection (85W Output) Forced Air of 200 LFM (125W output)	
Overshoot	5% overshoot at turn-on, 5% overshoot at turn-off, under all conditions	

### ENVIRONMENT

Operating Temperature	-20°C to +70°C
Temperature Derating	50% derating at 70°C
Cooling	Convection/Airflow
Storage Temperature	-40°C to +85°C
Altitude	Operating: 500 to 5,000 meter
Relative Humidity	Non-operating: 500 to 40,000 ft
Shock	5% to 95%, Non-condensing
Vibration	Non-operating: Half-sine, 40 gpk, 10ms, 3 axes, 6 shocks total Random vibration per MIL-STD-810E, Method 514.4, Cat. 1, Figure 514.4-1, 1 hr in each of three axes



### SAFETY

UL	EN/CSA/UL/IEC 60601-1 3rd edition & EN62368-1
CSA	Same as above
Demko	Same as above
CB Report	Yes
Isolation Type	Double/Reinforced between input and output

### ISOLATION SPECIFICATIONS

Insulation Safety Rating	Input to Ground	1 x MOPP
	Input to Output	2 x MOPP
Electric Strength Test Voltage	Input to Ground	1500VAC
	Input to Output	4,000VAC
	Output to Ground	1500VAC

### PROTECTION

Overtemperature Protection	Automatic power shutdown
Overload Protection	120% - 180% of rated output current value, Hiccup mode
Short Circuit Protection	Short across the output terminals will not cause damage to the unit. Hiccup mode
Overvoltage Protection	OVP firing reduces output voltage to <50% of nominal in <50ms. See chart for trip range

### EMI/EMC COMPLIANCE

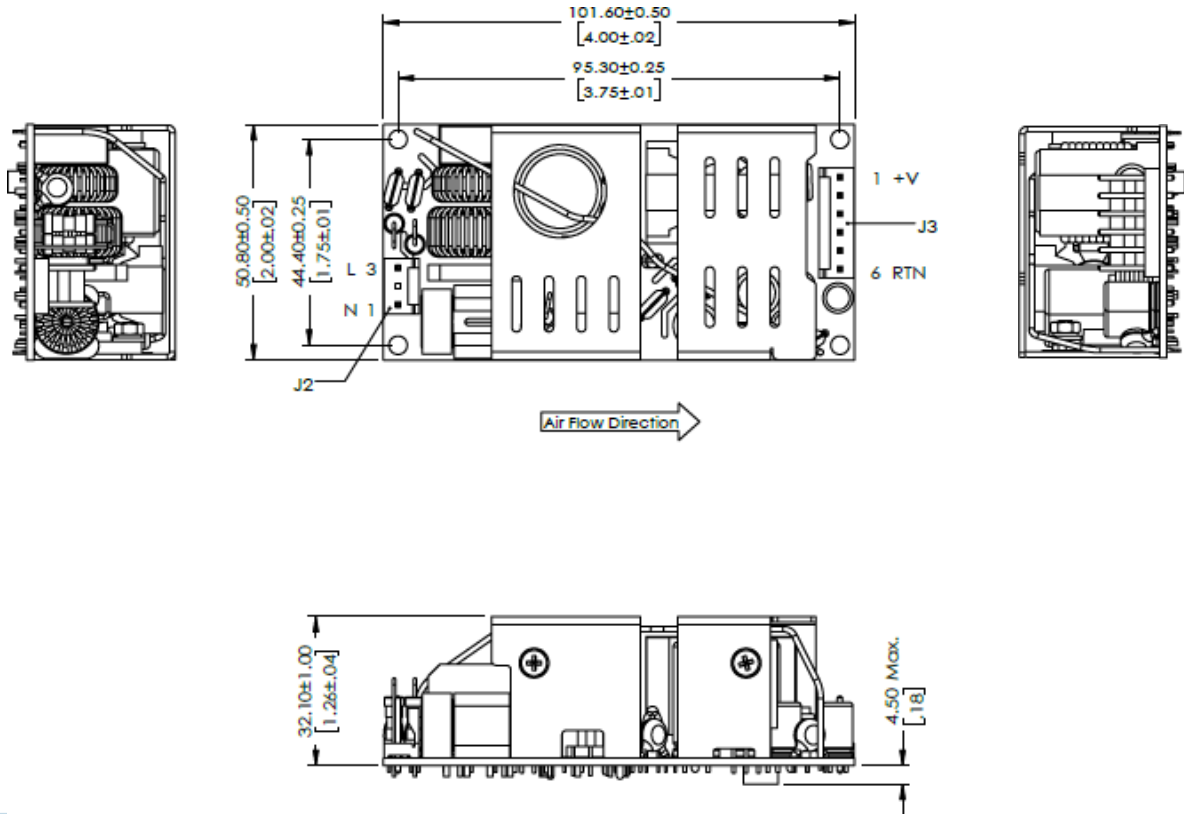
Conducted Emissions	EN55032 Class B; FCC Part 15	Class I and Class II Input Models
Radiated Emissions	EN55032 Class B; FCC Part 15	Class I and Class II Input Models
Harmonic Current Emissions	EN61000-3-2, Class A, B, C & D	Meets class C from 25W to 125W. This is based on limits set @ 125W
Voltage Fluctuations & Flicker	EN61000-3-3	<b>Performance criteria are defined as following:</b> A – Normal performance during and after test B – Temporary degradation, self-recoverable C – Temporary degradation, operator intervention required to recover the operation
Static Discharge Immunity	EN61000-4-2, Level 4: 6kV contact, 8kV air, Criteria A	
RF Field Susceptibility	EN61000-4-3, Level 3 (3V/m), Criteria A	
Fast Transients/Bursts	EN61000-4-4, Level 3 (PS: 2kV-40A, other lines 1kV-20A), Criteria A	
Surge Susceptibility	EN61000-4-5, Installation Class 3 (1kV diff. mode, 2kV common mode), Criteria A	
Conducted RF Susceptibility	EN61000-4-6, Level 3 (3Vrms), Criteria A	
Power Frequency Magnetic Field Test	EN61000-4-8, Level 3 (3A/m), Criteria A	
Voltage Sags & Surges	EN61000-4-11 - 95% dip/0.5 cycle (Criteria A), 60%/5cycles (Criteria B), 30%/25 cycles (Criteria A) Loading is 70% of 100W with 100VAC	



### RELIABILITY

MTBF	>500K hours, 25°C ambient, full load	Calculation is done based on Telcordia Reports for each model is available
Warranty	3 Years	
HALT Data	Per SL Power Halt procedure	Report is available

### MECHANICAL DRAWING



### CONNECTOR OPTIONS

<b>Input Connector J2</b>	<b>MATING CONNECTOR</b> Tyco/AMP 640250-3 Terminals: 3-640252-1	<b>CONFIGURATION</b> #1 AC NEUTRAL #2 EMPTY #3 AC LINE
<b>Output Connector J3</b>	<b>MATING CONNECTOR</b> AMP 640250-6 Terminals: 3-640252-1	<b>CONFIGURATION</b> Pin 1) +Vout    Pin 4) RTN Pin 2) +Vout    Pin 5) RTN Pin 3) +Vout    Pin 6) RTN

- Notes:
1. All dimensions in inches (mm) undefined tolerance is ±.02" (0.5mm)
  2. Mounting holes should be connected together for EMI purpose.
  3. FG is safety ground connection.
  4. This power supply requires mounting on metal standoffs 0.20" (5mm) Min. in height.