Rev. 05.27.08 LPS60 Series 1 of 3

LPS60 Series

60 Watts

Total Power: 60 - 80 Watts **Input Voltage:** 85 - 264 Vac 120 - 300Vdc # of Outputs: Single



- Universal input
- 3" x 5" footprint
- Remote sense
- Built in EMI filter
- Low output ripple
- Adjustable output voltage
- Overload protection
- 110 KHz switching frequency
- LPX60 enclosure kit available

Safety

VDE 0805/EN60950 (IEC950)

11774-3336-1255

(LC #86665)

UL **UL1950**

E132002 CSA 22.2-234 Level 3

CSA

LR53982C

NEMKO EN 60950/EMKO-TUE

P95100123 (74-sec) 203

CB Certificate and report

1521, 1522, 1523, 1524

CE Mark (LVD)





Input

Input range: 85 - 264 Vac (wide range)

120 - 300 Vdc

47-440 Hz Frequency:

Inrush current: <18A peak @ 115 Vac, <36 A peak @230 Vac,

cold start @ 25 °C

Input current: 1.5 A max. (RMS) @ 115 Vac

Efficiency: 70% typical at full load

EMI filter: FCC Class B conducted; CISPR22 Class B conducted; EN55022

Class B conducted; VDE0878PT3 Class B conducted

Safety ground leakage

current:

<0.5 mA @ 50/60 Hz; 264 Vac input

Output

Maximum power: 60 W for convection; 80 W with 30 CFM forced air

Adjustment range -5, +10% minimum

Hold-up time 20 ms @ 60 W load, 115 Vac nominal line

Overload protection Short circuit protection on all outputs.

Case overload protected @ 110-145% above peak rating

Overvoltage protection 5 V output; 5.7 - 6.7 Vdc. Other outputs 10% to 25%

above nominal output

Remote sense Compensates for 0.5 V lead drop min. Will operate without

remote sense connected. Reverse connection protected.





Environmental Specifications

Operating temperature: 0° to 50 °C ambient derate each output as 2.5%

per degree from 50° to 70 °C, -20 °C startup

Storage temperature: -40°C to +85 °C

Electromagnetic designed to meet IEC801, -2, -3, -4, -5, -6, Level 3

susceptibility:

Humidity:

Operating; non-condensing 5% to 95% RH Three orthogonal axes, sweep at 1 cot/min,

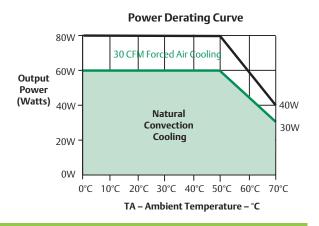
Vibration: 5 min. dwell at four major resonances 0.75 G peak

5 Hz to 500 Hz, operational

Temperature coefficient ±0.04% per °C

MTBF demonstrated >550,000 hours at full load and 25 °C ambient

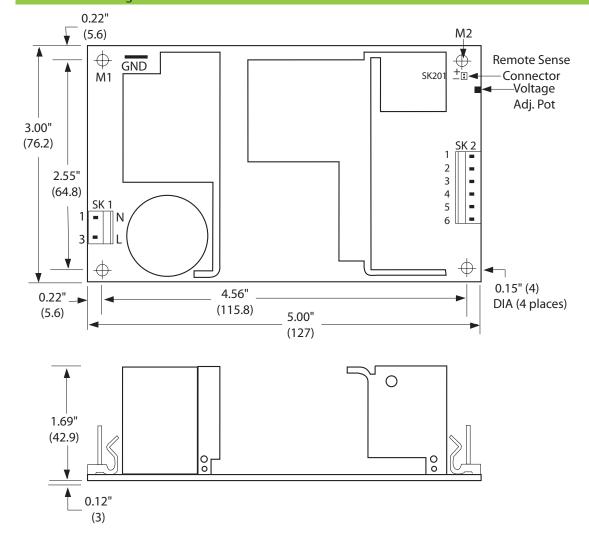
conditions



Rev. 05.27.08 LPS60 Series

2 of 3

Mechanical Drawing



Rev. 05	.27.08
LPS60	Series
	3 of 3

Ordering Information									
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM forced Air	Peak Load¹	Regulation ²	Ripple P/P (PARD)³		
LPS61	3.3 V	2 A	12 A	16 A	18 A	±2%	33 mV		
LPS62	5 V	0 A	12 A	16 A	18 A	±2%	50 mV		
LPS63	12 V	0 A	5 A	6.7 A	7.5 A	±2%	120 mV		
LPS64	15 V	0 A	4 A	5.3 A	6 A	±2%	150 mV		
LPS65	24 V	0 A	2.5 A	3.3 A	3.8 A	±2%	240 mV		
LPS68	48 V	0 A	1.3 A	1.7 A	1.9 A	±2%	480 mV		

- 1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
- 2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
- 3. Peak-to-peak with 20 MHz bandwidth and 10 μF (tantalum capacitor) in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.

Pin Assignments								
Connector LPS61		LPS62	LPS63	LPS64	LPS65	LPS68		
SK1-1	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral		
SK1-3	Line	Line	Line	Line	Line	Line		
SK2-1	3.3 V	5 V	+12 V	+15 V	+24 V	48 V		
SK2-2	3.3 V	5 V	+12 V	+15 V	+24 V	48 V		
SK2-3	3.3 V	5 V	+12 V	+15 V	+24 V	48 V		
SK2-4	Common	Common	Common	Common	Common	Common		
SK2-5	Common	Common	Common	Common	Common	Common		
SK2-6	Common	Common	Common	Common	Common	Common		
SK201-1	+Sense	+Sense	+Sense	+Sense	+Sense	+Sense		
SK201-2	-Sense	-Sense	-Sense	-Sense	-Sense	-Sense		

Mating Connectors

AC Input: Molex 09-50-8031 (USA) Not required for (-T) option 09-91-0300 (UK)

PINS: 08-58-0111

DC Outputs: Molex 09-50-8061 (USA) Not required for (-T) option

09-91-0600 (UK) PINS: 08-58-0113

Remote Sense: Molex 22-01-2025 PINS: 08-52-0113

Astec Connector Kit #70-841-006, includes all of the above

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is ± 0.02 " (± 0.5 mm)
- 3. Mounting holes M1 and M2 should be grounded for EMI purposes.
- 4. Mounting hole M1 is safety ground connection.
- Specifications are for convection rating at factory settings at 115 Vac input, 25°C unless otherwise stated.
- 6. Warranty: 2 year
- 7. Weight: 0.75lbs/0.34kg

Americas

5810 Van Allen Way Carlsbad, CA 92008 USA

Telephone: +1 (760) 930 4600 Facsimile: +1 (760) 930 0698

Europe (UK)

Waterfront Business Park Merry Hill, Dudley West Midlands, DY5 1LX United Kingdom

Telephone: +44 (0) 1384 842 211 Facsimile: +44 (0) 1384 843 355

Asia (HK)

14/F, Lu Plaza 2 Wing Yip Street Kwun Tong, Kowloon Hong Kong

Telephone: +852 2176 3333 Facsimile: +852 2176 3888

For global contact, visit:

www.powerconversion.com techsupport.embeddedpower @emerson.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Emerson Network Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

Emerson Network Power.

The global leader in enabling business-critical continuity.

AC Power

Connectivity

DC Power

Embedded Computing

Embedded Power

Monitoring

Outside Plant

Power Switching & Controls

Precision Cooling

Racks & Integrated Cabinets

Services

Surge Protection

EmersonNetworkPower. com

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2008 Emerson Electric Co.