# 60 Watts LPS60 Series

## Special Features

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

## Environmental

Operating temperature: 0° to 50°C ambient derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3

Humidity: Operating; non-condensing 5% to 95%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75 G peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: ±.04% per °C

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

Electrical Specs

Input Input range

60-80 Watts

120-300 VDC

Single

Total Power:

*# of Outputs:* 

Input Voltage: 85-264 VAC

Frequency Inrush current

Input current Efficiency EMI filter

Safety ground leakage current

### Output

Maximum power

Adjustment range Hold-up time

Overload protection

Overvoltage protection

Remote sense

85-264 VAC 120-300 VDC 47-440 Hz <18 A peak @ 115 VAC; <36 A peak @ 230 VAC, cold start @ 25°C 1.5 A max. (RMS) @ 115 VAC 70% typical at full load FCC Class B conducted CISPR 22 Class B conducted EN55022 class B conducted VDE 0878 PT3 class B conducted

<0.5 mA @ 50/60 Hz, 264 VAC input

60 W for convection; 80 W with 30 CFM forced air -5, +10% minimum 20 ms @ 60 W load, 115 VAC nominal line Short circuit protection on all outputs. protected @ 110-Case overload 145% above peak rating 5 V output: 5.7-6.7 VDC. Other outputs 10% to 25% above nominal output Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

	Safety	
VDE	0805/EN60950 (IEC950)	11774-3336-1255 (LC #86665)
UL	UL1950	È132002
CSA	CSA 22.2-234 Level 3	LR53982C
NEMKO	EN 60950/EMKO-TUE (74-sec) 203	P95100123
CB CE	Certificate and report Mark (LVD)	1521, 1522, 1523, 15

rev 08.11.04

Technical Support: (888) 41-ASTEC or (407) 241-2752 Americas: (760) 930-4600 Europe (UK) 44 (1384) 842-211 Asia (HK) 852-2437-9662

## Specia

#### AMERICAS 5810 Van Allen Way Carlsbad, CA 92008

Telephone: 760-930-4600 Facsimile: 760-930-0698

#### EUROPE

**ASIA** Units 2111-2116, Level 21



Astec House, Waterfront Business Park Merry Hill, Dudley West Midlands, DV5 1LX, UK Telephone: 44 (1384) 843-355 Facsimile: 44(1384) 843-355

## **Ordering Information**

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load1	Regulation2	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  $10 \,\mu$ F in parallel with a 0.1  $\mu$ F capacitor at rated line voltage and load ranges.

## **Pin Assignments**

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

Mating Connectors

AC Input:	Molex 09-50-8031 (USA)
	09-91-0300 (UK)
	PINS: 08-58-0111

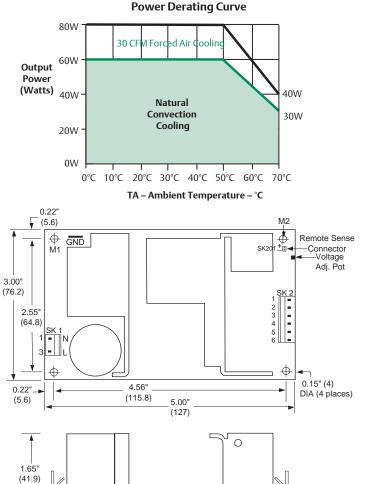
DC Outputs: Molex 09-50-8061 (USA) 09-91-0600 (UK) PINS: 08-58-0111

Remote Sense: Molex 22-01-2025 PINS: 08-50-0114

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

#### Notes:

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is ±.02"
- 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: 1 year
- 7. Weight: 0.75 lb. / 0.34 kg



0.12' (3)

