Rev. 02.05.07 LPS25 Series 1 of 3

# **LPS25 Series**

## 25 Watts

Total Power: 25-40 Watts Input Voltage: 85-264 VAC 120-300 VDC

# of Outputs: Single



Universal input3" x 5" footprintLess than 1U high

• Remote sense

Terminal block option (-T)

Built-in EMI filterLow output ripple

Adjustable output

Overvoltage protection

Overload protection

• 110 KHz switching frequency

LPX40 enclosure kit available

• 2 year warranty

# Safety

**VDE** 0805 EN60950 11774-3336-1241

(LC#84936)

**UL** UL60950 E132002 **CSA** CSA 22.2-234 Level 3

LR53982C

**NEMKO** EN 60950/EMKO-TUE

P95100442 (74-sec) 203

CB Certificate and report

1577, 1578, 1579, 1580

CE Mark (LVD)



# **Electrical Specifications**

### Input

Input range 85-264 VAC; 120-300 VDC

Frequency 47-440 Hz

Inrush current <15A peak @ 115VAC; <30A peak @ 230VAC, cold start @ 25°C

Input current 1A max. (RMS) @ 115VAC Efficiency 70% typical at full load

EMI filter FCC Class B conducted; CISPR 22 Class B conducted;

EN55022 Class B conducted

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

leakage current

Output

Maximum power 25 W for convection; 40W with 30CFM forced air

Adjustment range -5, +10% minimum

Hold-up time 20 ms @ 25W load, 115VAC nominal line Overload protection Short circuit protection on all outputs

Case overload protected @ 110-145% above peak rating Overvoltage protection 5V output; 5.7 to 6.7VDC. Other outputs 10% to 25% above

nominal output

Remote sense Compensates for 0.5 V lead drop minimum

Will operate without remote sense connected

Reverse connection protected





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# **Environmental Specifications**

Operating temperature: 0° to 50°C ambient. Derate each output 2.5% per degree from

50° to 70°C, -20°C start up.

Storage temperature: -40°C to +85°C

Electromagnetic

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

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

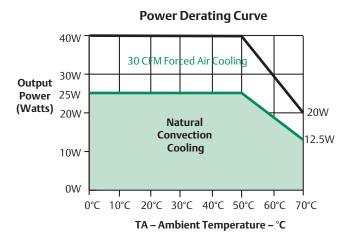
Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four

major resonances 0.75G peak 5Hz to 500Hz, operational

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

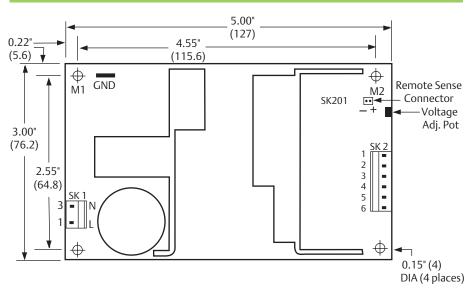
Ordering	Ordering Information									
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>			
LPS22(-T)	5V	0A	5A	8A	9A	±2%	50 mV			
LPS23(-T)	12V	0A	2.1A	3.3A	3.7A	±2%	120 mV			
LPS24(-T)	15V	0A	1.7A	2.7A	3A	±2%	150 mV			
LPS25(-T)	24V	0A	1.1A	1.8A	1.9A	±2%	240 mV			

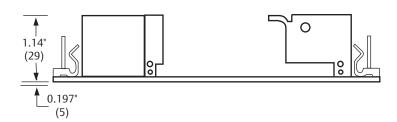
- 1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
- 2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
- 3. Peak-to-peak with 20 MHz bandwidth and 10  $\mu F$  in parallel with a 0.1  $\mu F$  capacitor at rated line voltage and load ranges.
- 4. (-T) indicates Terminal Block option for input and output (instead of Molex type)



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## Mechanical Drawing





#### Pin Assignments

Connector	LPS22	LPS23	LPS24	LPS25
SK1-1	Line	Line	Line	Line
SK1-3	Neutral	Neutral	Neutral	Neutral
SK2-1	+5 V	+12 V	+15V	+24V
SK2-2	+5 V	+12 V	+15V	+24V
SK2-3	+5 V	+12 V	+15V	+24V
SK2-4	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common
SK2-6	Common	Common	Common	Common
SK201-1	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-Sense	-Sense	-Sense

## **Mating Connectors**

AC Input: Molex 09-50-8031 (USA) Not required for (-T) option 09-91-0300 (UK) PINS: 08-52-0113

DC Outputs:  $\,$  Molex 09-50-8061 (USA) Not required for (-T) option  $\,$  09-91-0600 (UK)

PINS: 08-52-0113 Molex 22-01-2025 PINS: 08-52-0123

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  $\pm 0.02"$  ( $\pm 0.5 mm$ )
- 3. Mounting holes M1 and M2 should be grounded for EMI purposes.
- 4. Mounting hole M1 is safety ground connection.
- 5. Specifications are for convection rating at factory settings at 115 VAC input, 25°C unless otherwise stated.
- 6. Warranty: 2 year

Remote

7. Weight: 0.5lbs/0.23kg

#### Astec

5810 Van Allen Way Carlsbad, CA 92008

USA

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

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

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

13-15, Shing Wan Road Tai Wai, Shatin, N. T. Hong Kong

Telephone: +852 2699 2868 Facsimile: +852 2699 1770

For global contact, visit:

## www.astecpower.com technicalsupport@astec.com

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