

LPS25 Series

25 Watts

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



Rev. 02.05.07
LPS25 Series
1 of 3

Special Features

- Universal input
- 3" x 5" footprint
- Less than 1U high
- Remote sense
- Terminal block option (-T)
- Built-in EMI filter
- Low 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 leakage current	<0.5 mA @ 50/60 Hz, 264 VAC input

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



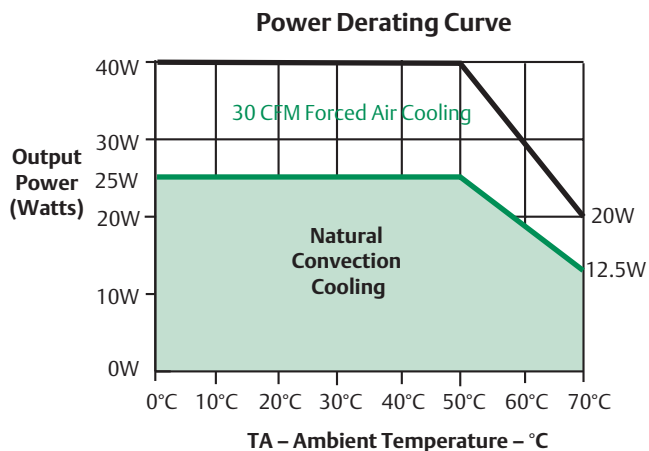
Environmental Specifications

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

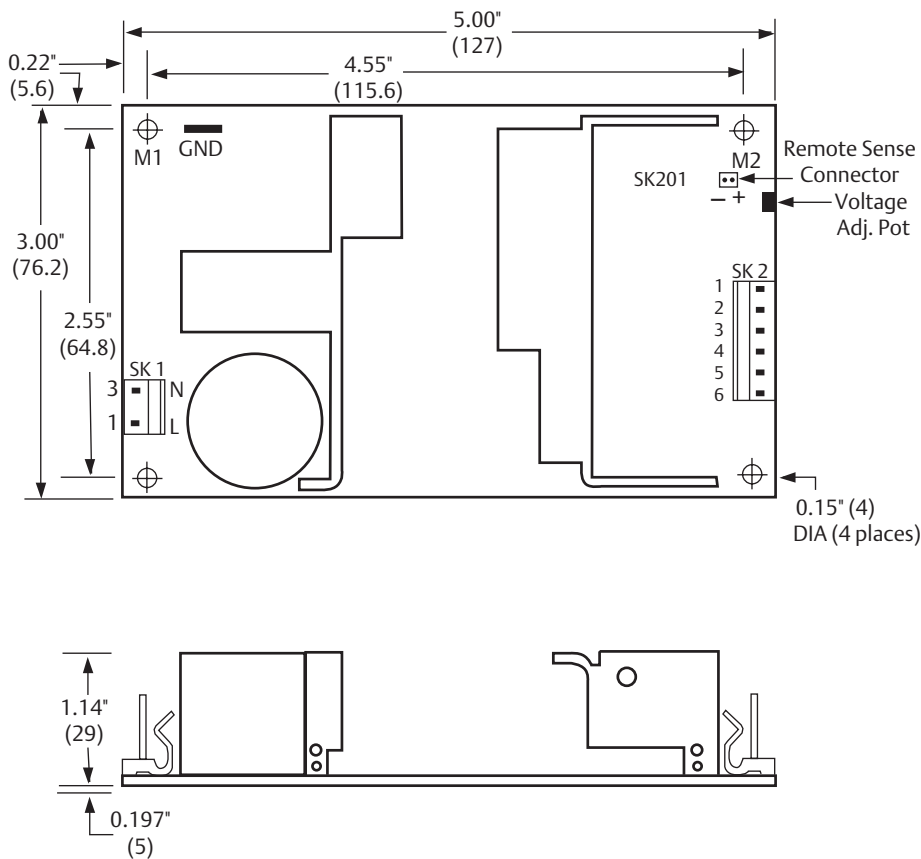
Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load ¹	Regulation ²	Ripple P/P (PARD) ³
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 μ F in parallel with a 0.1 μ F capacitor at rated line voltage and load ranges.
4. (-T) indicates Terminal Block option for input and output (instead of Molex type)



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

Remote Sense: 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 $\pm 0.02"$ (± 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
7. Weight: 0.5lbs/0.23kg

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