

LPS 40

40 Watts



LPS 40 Series

Total Power	40 - 55 Watts
Input Voltages	85 - 264 VAC 120 - 370 VDC
# of Outputs	Single

SPECIAL FEATURES

- Universal input
- High efficiency
- Remote sense
- Built-in EMI filter
- Low output ripple
- Adjustable output
- Overvoltage protection
- Overload protection
- Enclosure kit available (see page 62)

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 EN61000-4, -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: $\pm 0.04\%$ per °C

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

ELECTRICAL SPECIFICATIONS

Input

Input range 85-264 VAC
120-370 VDC

Frequency 47-440 Hz

Inrush current <18 A peak @ 115 VAC;
<36 A peak @ 230 VAC,
cold start @ 25°C

Input current 1 A max. (RMS) @ 115 VAC

Efficiency 70% typical at full load

EMI filter FCC Class B conducted
CISPR 22 Class B conducted
EN55022 class B conducted
VDE 0878 PT3 class B conducted

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

Output

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

Minimum load no minimum load required

Adjustment range -5, +10% minimum

Hold-up time 20 ms @40 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 to 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.

SAFETY

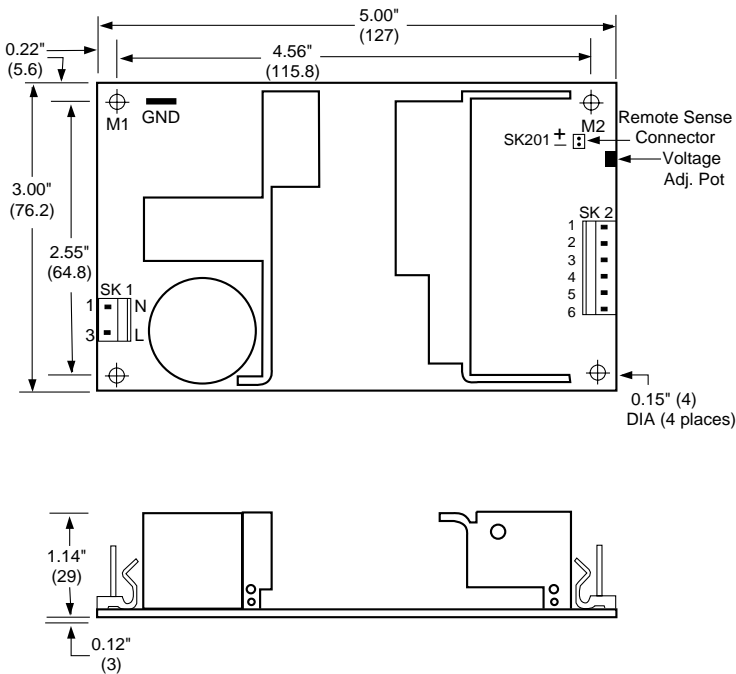
VDE	0805/EN60950 (IEC950)	11774-3336-1241 (LC# 84936)
UL	UL1950	E132002
CSA	CSA 22.2-234 Level 3	LR53982C
NEMKO	EN 60950/EMKO-TUE (74-sec) 203	P94100375
BABT	EN60950/BS7002	PS/604781
CB	Certificate and report	1119,1125,1126,1127
CE	Mark (LVD)	

ORDERING INFORMATION

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load ¹	Regulation ²	Ripple P/P (PARD) ³
LPS41	3.3 V	0 A	8 A	11 A	12 A	±2%	33 mV
LPS42	5 V	0 A	8 A	11 A	12 A	±2%	50 mV
LPS43	12 V	0 A	3.3 A	4.5 A	5 A	±2%	120 mV
LPS44	15 V	0 A	2.6 A	3.6 A	4 A	±2%	150 mV
LPS45	24 V	0 A	1.6 A	2.3 A	2.5 A	±2%	240 mV
LPS48	48 V	0 A	0.9 A	1.2 A	1.3 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 in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

DRAWINGS



MATING CONNECTORS

AC Input: Molex 09-50-8031 (USA)
26-03-4030 (UK)
PINS: 05-58-0189

DC Outputs: Molex 09-50-8061 (USA)
26-03-4061 (UK)
PINS: 05-58-0189

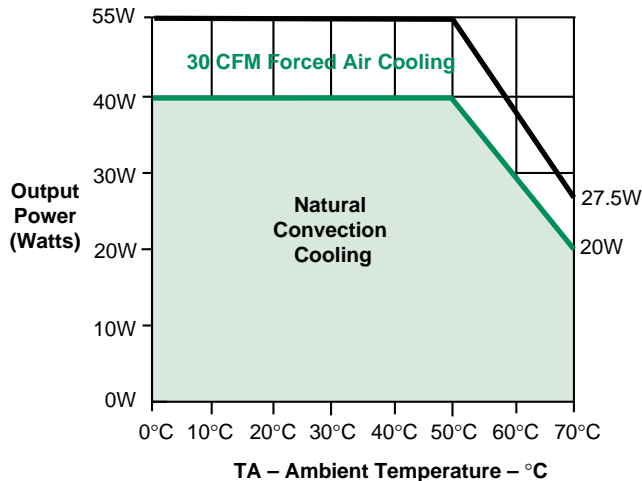
Remote Sense: Molex 22-01-2025
PINS: 08-50-0114

Astec Connector Kit #70-841-006

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.
5. Specifications are for convection rating at factory settings at 115 VAC input, 25°C unless otherwise stated.
6. Warranty: 1 year
7. Weight: 0.5 lb. / 0.23 kg

Power Derating Curve



PIN ASSIGNMENTS

Connector	LPS41	LPS42	LPS43	LPS44	LPS45	LPS48
SK1-1	Neutral	Neutral	Neutral	Neutral	Neutral	Natural
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

