

LPT 40

40 Watts

LPT 40 Series

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



SPECIAL FEATURES

- Universal input
- High efficiency
- Remote sense on main output
- Built-in EMI filter
- Low output ripple
- Adjustable main 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

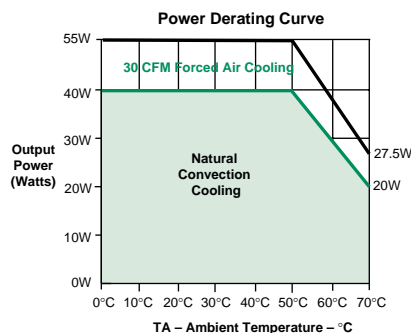
Humidity: Operating; non-condensing
5% to 95%

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: ±.04% per °C

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



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 (60% for LPT41)

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, (LPT41, 25W);
55 W with 30 CFM forced air (LPT41, 41W)

Minimum load minimum load required, see table

Adjustment range -5, +10% minimum

Cross regulation ±2% on output 1; ±5% on outputs 2, 3

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 5.7 to 6.7 VDC on main output

Remote sense +5V output (except LPT41 3.3V output)
compensates for 0.5 V lead drop min. Will
operate without remote sense connected.
Reverse connection protected.

SAFETY

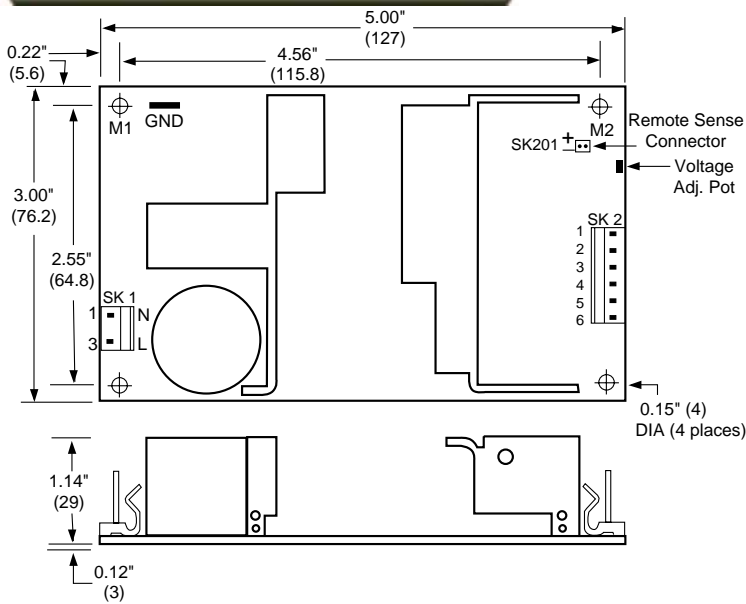
VDE	0805/EN60950 (IEC950)	11774-3336-1241 (LC# 84936)
UL	UL1950	E132002
CSA	CSA 22.2-234 Level 3	LR53982C
NEMKO	EN 60950/EMKO-TUE (74-sec) 203	P94100374
BABT	EN60950/BS7002	PS/604782
CB	Certificate and report	1118,1122,1123,1124
CE	Mark (LVD)	

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
LPT41	+3.3 V	0.5 A	4 A	7 A	7 A	±2%	50 mV
	+5 V	0	1.5 A	2.0 A	2.5 A	±2%	50 mV
	+12 V	0	0.5 A	0.7 A	0.7 A	±5%	120 mV
LPT42	+5 V	0.4 A	4 A	5 A	7 A	±2%	50 mV
	+12 V	0.2 A	2 A	2.5 A	4 A	±5%	120 mV
	-12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
LPT43	+5 V	0.5 A	6 A	8 A	9 A	±2%	50 mV
	+12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
	-12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
LPT44	+5 V	0.4 A	4 A	5 A	7 A	±2%	50 mV
	+12 V	0.2 A	2 A	2.5 A	4 A	±5%	120 mV
	-5 V	0 A	0.5 A	0.7 A	1 A	±5%	50 mV
LPT45	+5 V	0.4 A	4 A	5 A	7 A	±2%	50 mV
	+15 V	0.2 A	2 A	2.5 A	3 A	±5%	150 mV
	-15 V	0 A	0.5 A	0.7 A	1 A	±5%	150 mV
LPT46	+5 V	0.4 A	4 A	5 A	6 A	±2%	50 mV
	+24 V	0.1 A	1.0 A	1.5 A	2 A	±7%	240 mV
	+12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
LPT47	+5 V	0.4 A	4 A	5 A	6 A	±2%	50 mV
	+24 V	0.2 A	1.0 A	1.5 A	2 A	±7%	240 mV
	-12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
LPT48	+5 V	0.4 A	4 A	5 A	6 A	±2%	50 mV
	+24 V	0.1 A	1.0 A	1.5 A	2 A	±7%	240 mV
	-5 V	0 A	0.5 A	0.7 A	1 A	±5%	50 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.
4. Minimum Loads are required for correct operation, unit will self protect if load is not connected.

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

PIN ASSIGNMENTS

Connector	LPT41	LPT42	LPT43	LPT44	LPT45	LPT46	LPT47	LPT48
SK1-1	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
SK1-3	Line	Line	Line	Line	Line	Line	Line	Line
SK2-1	5 V	+12 V	+12 V	+12 V	+15 V	+24 V	+24 V	+24 V
SK2-2	3.3 V	+5 V	+5 V	+5 V	+5 V	+5 V	+5 V	+5 V
SK2-3	3.3 V	+5 V	+5 V	+5 V	+5 V	+5 V	+5 V	+5 V
SK2-4	Common	Common	Common	Common	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common	Common	Common	Common	Common
SK2-6	12 V	-12 V	-12 V	-5 V	-15 V	+12 V	-12 V	-5 V
SK201-1	+3.3V Sense	+5V Sense	+5V Sense	+5V Sense	+5V Sense	+5V Sense	+5V Sense	+5V Sense
SK201-2	-3.3V Sense	-5V Sense	-5V Sense	-5V Sense	-5V Sense	-5V Sense	-5V Sense	-5V Sense

REV 10.5.99

