# 150 Watts LPQ150 Series



### **Special Features**

- Auto ranging input
- Remote sense on main output
- Remote inhibit
- Single wire current sharing
- Power fail
- Built-in EMI filter ٠
- ٠ Low output ripple
- ٠ 135 khz switching frequency
- Overvoltage protection
- Overload protection •
- Adjustable floating 4th output • (On LPQ152 and LPQ153 models)
- Optional cover (-C suffix). See page 64.

### 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 condition

#### Input Voltage: 85-132 / 170-264 VAC 220-300 VDC *# of Outputs:* Quad

110-150 Watts

## **Electrical Specs**

Input Input range

Total Power:

Frequency Inrush current Efficiency FMI filter

85-132 VAC or 170-264 VAC automatically selected. 220-300 VDC 47-63 Hz 38 A max, cold start @ 25°C 75% typical at full load Meets 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

110 W convection (75 W with cover)

Safety ground leakage current

## Output

Maximum power

Adjustment range

Cross regulation

Hold-up time Overload protection

Overvoltage protection

### Logic Control

Power failure

Remote inhibit

Remote sense

150 W with 30 CFM forced air (130 W with cover) ±5% on main; 5-25 V on 4th output on LPQ 152 & LPQ 153  $\pm 2\%$  on output 1;  $\pm 3\%$  on outputs 2, 3 & 4

20 ms @110 W load at nominal line Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating

5.7-6.7 VDC on main output

#### TTL logic signal goes high 50-150 msec after 5 V output. It goes low at least 3 msec before loss of regulation Requires an external TTL high signal to inhibit outputs Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection

protected.

	Safety	
VDE UL CSA NEMKO CB CE	0805/EN60950 (IEC950) UL1950 CSA 22.2-234 Level 3 EN 60950/EMKO-TUE (74-sec) 203 Certificate and report Mark (LVD)	11774-3336-1260 (LC# 88585) EI32002 LR53982 P95102999 2061 rev 12.10.03

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ASIA



Model	Output	Minimum	Maximum Load with	Maximum Load with	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple
Number	Voltage	Load	Convection Cooling	30 CFM Forced Air	Load		P/P (PARD) <sup>3</sup>
LPQ152	5 V	2 A	15 A	22 A	30 A	±2%	50 mV
	12 V	.1 A	6 A	8 A	10 A	±3%	120 mV
	-12 V	.1 A	2 A	2.5 A	3 A	±3%	120 mV
	±5-25 V	0 A	2.5 A	3 A	3 A	±3%	240 mV, max.
LPQ153	5 V	2 A	15 A	22 A	30 A	±2%	50 mV
	15 V	.1 A	4.8 A	6.4 A	8 A	±3%	150 mV
	-15 V	.1 A	1.6 A	2 A	2.4 A	±3%	150 mV
	±5-25 V	0 A	2.5 A	3 A	3 A	±3%	240 mV, max.
LPQ154	5 V	2 A	15 A	22 A	30 A	±2%	50 mV
	12 V	.1 A	6 A	8 A	10 A	±3%	120 mV
	-12 V	.1 A	2 A	2.5 A	3 A	±3%	120 mV
	24 V	.5 A	3.5 A	4.5 A	5 A	+10/-5%	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 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

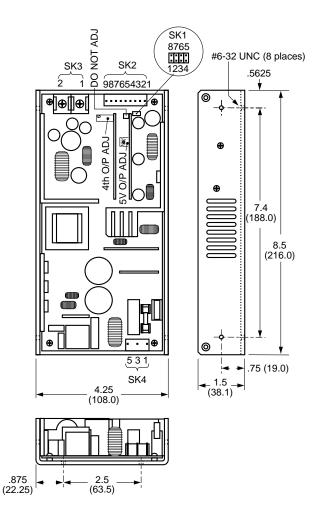
4. 4th output adjustable 5-25 V factory set at 5 V.

5. Minimum loads are required.

Note: -C suffix added to the model number indicates cover option.

# Pin Assignments

SK1 SK2 SK3	nector PIN 1 PIN 2 PIN 3 PIN 4 PIN 5 PIN 6 PIN 7 PIN 8 PIN 1,2 PIN 3,4,5 PIN 6 PIN 7 PIN 8 PIN 1,2 PIN 3,4,5 PIN 6 PIN 7 PIN 8 PIN 1,2 PIN 1,2 PIN 3,4,5 PIN 6 PIN 7 PIN 8 PIN 1,2 PIN 1,2 PIN 3,4,5 PIN 6 PIN 7 PIN 8 PIN 1,2 PIN 1,2 PIN 7 PIN 8 PIN 1,2 PIN 1,2 PIN 7 PIN 8 PIN 1,2 PIN 7 PIN 8 PIN 7 PIN 8 PIN 7 PIN 8 PIN 1,2 PIN 3,4,5 PIN 1,2 PIN 3,4,5 PIN 1,2 PIN 3,4,5 PIN 1,2 PIN 3,4,5 PIN 1,2 PIN 3,4,5 PIN 3,5 PIN 4 PIN 3,4,5 PIN 4 PIN 3,4,5 PIN 4 PIN 3,4,5 PIN 4 PIN 3,4,5 PIN 4 PIN 4 P	LPQ152 INHIBIT -ve INHIBIT +ve +12 V No Connection COMMON -SENSE +SENSE I SHARE +12 V COMMON -12 V POK +5 V to +25 V (Float) COMMON (Float) COMMON +5 V GROUND LINF	COMM -SENSE +SENSE I SHARI +15 V COMM -15 V POK +5 V to	-ve +ve inection ON 	LPQ154 INHIBIT -ve INHIBIT +ve +12 V No Connectio COMMON -SENSE +SENSE I SHARE +12 V COMMON -12 V POK +24 V COMMON COMMON +5 V GROUND IINF
(SK4 (SK2			(UK) (USA) (UK) (USA)	<ul> <li>Notes</li> <li>Specificat without n</li> <li>All dimen tolerance</li> <li>Specificat rating at f otherwise</li> <li>Remote ir 5V @ 10n</li> <li>Mounting depth is 0</li> <li>Warranty</li> </ul>	sions in inches ( is ±0.02". ions are for com actory settings e stated. whibit requires a hA to activate. (6-32) maximu 1.12".



**EMERSON** 115 **Network Power** 

Astec Connector Kit #70-841-010, includes al of the above.