250 Watts LPQ250 Series

Total Power: 250 Watts Input Voltage: 85-264 VAC

120-300 VDC

of Outputs: Quad



Special Features

- Active power factor correction
- IEC EN61000-3-2 compliance
- Remote sense on main output
- Power fail and remote inhibit
- Single wire current sharing
- · Built-in EMI filter
- Adjustable floating 4th output
- 2 Supervisory outputs 5 V and 12 V
- Overvoltage protection
- Overload protection
- Thermal overload protection
- DC power good
- Cover -C
- 120 KHz switching frequency
- Optional with fan cover -CF
- Optional end fan cover -CEF

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 0.7 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 conditions

Americas: (760) 930-4600

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Electrical Specs

Input

Input range 85-264 VAC: 120-300 VDC

47-440 Hz Frequency

Inrush current 20 A max., cold start @ 25°C Efficiency 75% typical at full load

EMI filter FCC Class B conducted and radiated

CISPR 22 Class B conducted and radiated

EN55022 Class B conducted and

radiated

VDE 0878 PT3 Class B conducted and

radiated.

Power factor 0.99 typical

Safety ground leakage

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

Output

Maximum power With cover: 250 W with 30 CFM forced

(-C) (-CF) (-CEF).

±5% min. on main: 5-25 V on 4th output Adjustment range Supervisory outputs

5 V @ 100 mA regulated, 12 V @ 500

Hold-up time 16 ms @ 250 W load, 115 VAC nominal

Overload protection Short circuit protection on all outputs.

Case overload protected @ 110-145%

above peak rating

Overvoltage protection 5 V output: 5.7-6.7 VDC.

Logic Control

Power failure TTL logic signal goes high 50-150 msec

> after 5V output. It goes low at least 4 msec before loss of regulation

Remote on/off Requires an external contact (N.O or

N.C) to inhibit outputs

DC-OK TTL logic goes high 50-150 msec after 5

V output. It goes low when there is loss

of regulation.

Remote sense Compensates for 0.5 V lead drop min.

Will operate without remote sense connected. Reverse connection

protected.

Safety

VDF 0805/EN60950 (IEC950) 11774-3336-1262

UL UI 1950 E132002 CSA CSA 22.2-234 Level 5 LR53982C **NEMKO** EN 60950/EMKO-TUE P95103550

(74-sec) 203

Certificate and report

CE Mark (LVD) 2186

Technical Support: (888) 41-ASTEC or (407) 241-2752

СВ

Europe (UK) 44 (1384) 842-211 Asia (HK) 852-2437-9662



EUROPE

Units 2111-2116, Level 21 Tower1, Metroplaza 223, Hing Fong Road Fwai Fong, New Territories Hong Kong Telephone: 852-2437-9662

Facsimile: 852-2402-4426



Ordering Information

	Output Voltage	Minimum Load	Maximum Load with 30 CFM Forced Air	Peak Load1	Regulation2	Ripple P/P (PARD)3	
Model Number							
LPQ252-C	+5 V	3 A	35 A	40 A	±2%	50 mV	
	+12 V	0 A	10 A	12 A	±3%	120 mV	
	-12 V	0 A	6 A	8 A	±3%	120 mV	
	±5-25 V	0 A	6 A	8 A	±3%	240 mV, max.	
LPQ253-C	+5 V	3 A	35 A	40 A	±2%	50 mV	
	+15 V	0 A	10 A	12 A	±3%	150 mV	
	-15 V	0 A	6 A	8 A	±3%	150 mV	
	±5-25 V	0 A	6 A	8 A	±3%	240 mV, max.	

- 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 μF capacitor at rated line voltage and load ranges.
- 4. 4th output 5-25 V factory set at 5 V.
- 5. Minimum Load is are required.
- 6. If optional CF or CEF fans are not used, 30CFM forced air cooling needs to be provided and is required through the length of the power supply. Not convection rated.

Note: -CF suffix added to the model number indicates cover with top fan. -CEF suffix added to the model number indicates cover with dual end mounted fan cover and AC inlet.

M3 (8 places) **Pin Assignments** 6-32 (2 places) М3 Main Output (6 places) #6-32 UNC (8 places) SK2 SK3 #6-32 UNC (2 places) Connector Terminal .24 (6.1) Block TB1 М3 65432 PIN 1 SK1 Neutral PIN 2 Line PIN 3 Ground 3.68 (93.6) SK2 PIN 1 +12 / 15 V SK7 PIN₂ Common FAN 5.46 138.6) PIN 3 Common PIN 4 -12 / 15 V PIN 5 5-25 V RFT Float 6.64 (168.6) PIN 6 5-25 V Float Optiona (-CF) Cover with Fan 8.52 (216.4) SK3 PIN 1 + Remote sense (80)PIN 2 - Remote sense 9.0 (228.6) Remote inhibit (N.O) PIN 3 PIN 4 Remote inhibit (N.C) 10.32 (262.0) PIN 5 Common Current sharing PIN 6 (55)PIN 7 Power Fail PIN 8 DC Power Good **e e ⊕**|⊕ Optional (-CEF) Cover #6-32 UN SK4 PIN 1 + Fan's power source (12 V @ 500 mA) (2 places) 1.18 (30.0) 6-32 (3 places) PIN 2 - Fan's power source (12 V @ 500 mA) with fans SK5 PIN 1 + Supervisory output supply (5 V @ 100 mA) 5.0 (127.0) PIN₂ - Supervisory output supply (5 V @ 100 mA) SK7 PIN 1 + Fan's power source (12 V @ 500 mA) (50.8) PIN 2 - Fan's power source (12 V @ 500 mA) (76.2)Mating Connectors 1.30 Molex: 22-01-1084 SK3 PINS: 08-70-0057 SK4 Molex 22-01-3027 PINS: 08-50-0114 Specifications subject to change without notice. Molex 22-01-3027 SK5 All dimensions in inches (mm), tolerance ±.02". PINS: 08-50-0114 3.42 (87.0) Specifications are at factory settings. Molex 22-01-3027 SK7 To enable normally closed remote inhibit, cut PINS: 08-50-0114 jumper J1

Mounting maximum insertion depth is 0.12".

5.

Warranty: 1 year Weight: 3.1 lb. / 1.41 kg

Astec Connector Kit #70-841-005, includes all of the above.