175 Watts LPQ172 Series

Total Power: 110-175 Watts Input Voltage: 85-264 VAC 120-300 VDC

of Outputs: Quad



Special Features

- Active power factor correction
- IEC EN61000-3-2 compliance
- Adjustable outputs on 1, 3 & 4 Remote sense on main output
- Single wire current sharing
- Power fail and remote inhibit
- · Built-in EMI filter
- Low output ripple
- Overvoltage protection
- · Overload protection
- Thermal overload protection
- DC power good
- 5 V standby output
- Adjustable floating 4th output
- Optional cover (-C suffix)

Environmental

Operating temperature: 0° to 50°C ambient derate each output at 2.5% per degree from

50° to 70°C (except for -C version)

Electromagnetic susceptibility: designed to meet EN61000-4, -2, -3, -4, -5, -6, -8, -11, 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 conditions

Americas: 1-888-41-ASTEC

Electrical Specs

Input

Input range 85-264 VAC, 120-300 VDC

Frequency 47-63 Hz

38 A max, cold start @ 25°C Inrush current 75% typical at full load Efficiency Meets FCC Class B conducted EMI filter

CISPR 22 Class B conducted EN55022 Class B conducted VDE 0878 PT3 Class B conducted

Power factor 0.99 typical

Safety ground

leakage current 1.0 mA @ 50/60 Hz, 264 VAC input

Output

Hold-up time

Maximum power 110 W convection (75 W with cover)

175 W with 30 CFM forced air

(130 W with cover)

Adjustment range 3.3 - 5.5V on main; -12 - 15V on 3rd

output 3.3 - 25 V on 4th output 20 ms @175 W load at nominal line Short circuit protection on all outputs.

Case overload protected @ 110-145% above peak rating

Overvoltage protection

Overload protection

Tracks outputs 1, 3 & 4; 15 to 35% Standby output 5 V @ 200 mA regulated ±5%

Logic Control

Remote inhibit

AC Power failure TTL logic signal goes high 100 - 500

msec after V1 output; It goes low at least

4 msec before loss of regulation Requires contact closure to inhibit

outputs

Remote sense Compensates for 0.5 V lead drop min.

> Will operate without remote sense connected. Reverse connection

protected.

DC Ok TTL logic signal goes high after main

Asia (HK): 852-2437-9662

output is in regulation. It goes low when

there is a loss of regulation

Safety

VDE 0805/EN60950 (IEC950)

UL UL1950

CB Certificate and report **CSA** CSA 22.2-234 Level 3

CE Mark (LVD)

NEMKO EN 60950/EMKO-TUE



AMERICAS

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Ordering Information

Model	Output	Minimum	Maximum Load with	Maximum Load with	Peak	Regulation2	Ripple
Number	Voltage	Load	Convection Cooling	30 CFM Forced Air	Load		P/P(PARD)3
LPQ172	5 V (3.3 - 5.5 V)	0 A	15 A	30 A	32 A	±2%	50 mV
	12 V	0 A	6 A	8 A	10 A	±3%	120 mV
	-12 V (-12 -15 V)	0 A	1.5 A	3 A	3.5 A	±3%	<1%
	±3.3-25 V	0.5 A*	2 A	5 A	5.5 A	±3%	<50mV or 1%

- 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 adjustable 3.3-25 V factory set at 5 V.
- 5. *Minimum loads are required when output set below 5 Volts
- 6. Remote inhibit resets OVP latch

Note: -C suffix added to the model number indicates cover option and is limited to 50C operation.

Pin Assignments

Connector	LPQ172			
SK1	PIN 1 PIN 2 PIN 3 PIN 4 PIN 5 PIN 6 PIN 7 PIN 8 PIN 9 PIN 10	N/C 5V Standby N/C V1 SWP Common +V1 sense Sense common Remote inhibit DC power good POK		
SK2	PIN 1,2 PIN 3,4,5 PIN 6 PIN 7 PIN 8 PIN 9			
SK3	TB-1 TB-2	COMMON +5 V (3.3V to 5.5V)		
SK4	PIN 1 PIN 3 PIN 5	GROUND LINE NEUTRAL		

Mating Connectors

Molex 09-50-8051 (USA) (SK4) AC Input:

Molex 09-91-0500 (UK) PINS: 08-58-0111

(SK3) Main output:

Molex BB-124-08

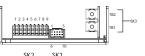
(SK2) Aux DC Output/Power fail:

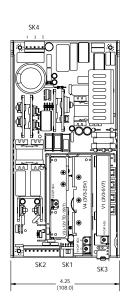
Molex 09-50-8091 (USA) Molex 09-91-0900 (UK) PINS: 08-58-0111

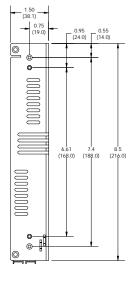
(SK1) Control Signals:

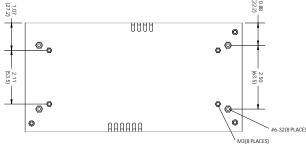
Molex 90142-0010 (USA) PINS: 90119-2110 or Amp: 87977-3 PINS: 87309-8

Astec connector kit #70-841-015, includes al of the above.









- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is ±0.02"
- 3. Specifications are for convection rating at factory settings unless
- otherwise stated.
- 4. Mounting screw maximum insertion depth is 0.12".
- 5. Warranty: 1 year 6. Weight: 2 lb / 0.91 kg

