

LPQ 250

250 Watts

LPQ 250 Series

Total Power	200 - 250 Watts
Input Voltages	85 - 264 VAC 120 - 370 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
- 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

ELECTRICAL SPECIFICATIONS

Input

Input range	85-264 VAC; 120-370 VDC
Frequency	47-440 Hz
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 air, (-C) (-CF) (-CEF).
Adjustment range	±5% min. on main: 5-25 V on 4th output
Supervisory outputs	5 V @ 100 mA regulated, 12 V @ 500 mA
Hold-up time	20 ms @ 250 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: 5.7-6.7 VDC. Other outputs 10% to 25% above nominal output

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

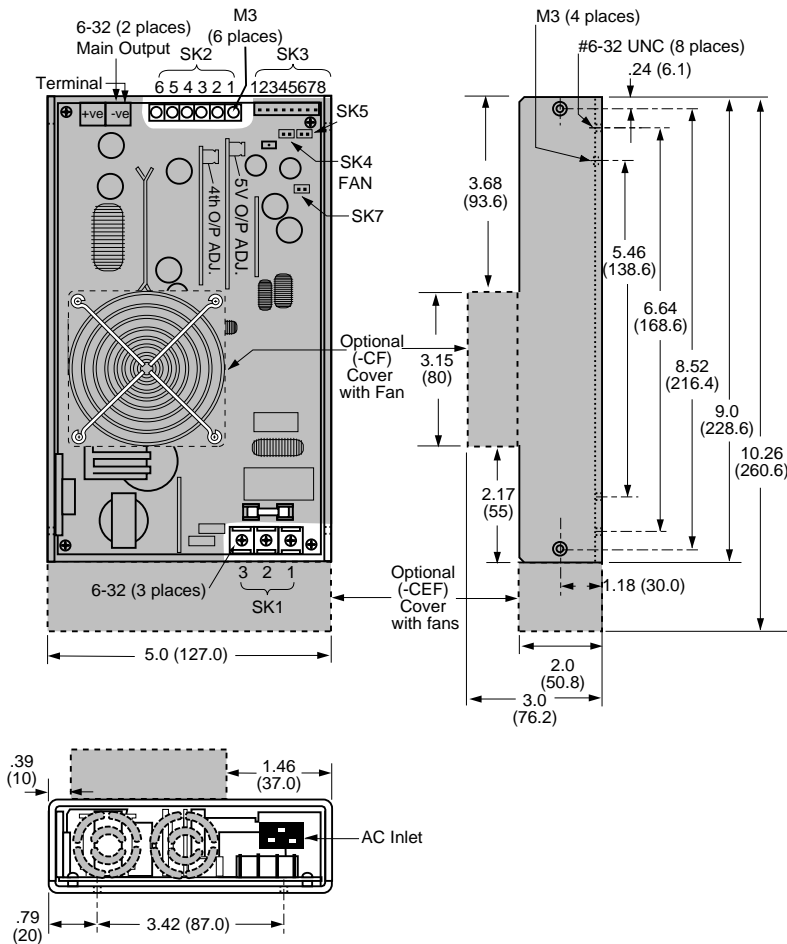
VDE	0805/EN60950 (IEC950)	11774-3336-1262
UL	UL1950	E132002
CSA	CSA 22.2-234 Level 5	LR53982C
NEMKO	EN 60950/EMKO-TUE (74-sec) 203	P95103550
BABT	EN60950/BS7002	605936
CB	Certificate and report	2186
CE	Mark (LVD)	

ORDERING INFORMATION

Model Number	Output Voltage	Minimum Load	Maximum Load with 30 CFM Forced Air	Peak Load ¹	Regulation ²	Ripple P/P (PARD) ³
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.

- Peak current lasting <30 seconds with a maximum 10% duty cycle.
 - At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
 - 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.
 - 4th output 5-25 V factory set at 5 V.
 - Minimum Load is are required.
 - 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 dial end mounted fan cover and AC inlet.

DRAWINGS



PIN ASSIGNMENTS

Connector

SK	PIN	Assignment
SK1	PIN 1	Neutral
	PIN 2	Line
	PIN 3	Ground
SK2	PIN 1	+12 / 15 V
	PIN 2	Common
	PIN 3	Common
	PIN 4	-12 / 15 V
	PIN 5	5-25 V RET Float
	PIN 6	5-25 V Float
SK3	PIN 1	+ Remote sense
	PIN 2	- Remote sense
	PIN 3	Remote inhibit (N.O)
	PIN 4	Remote inhibit (N.C)
	PIN 5	Common
	PIN 6	Current sharing
	PIN 7	Power Fail
	PIN 8	DC Power Good
SK4	PIN 1	+ Fan's power source (12 V @ 500 mA)
	PIN 2	- Fan's power source (12 V @ 500 mA)
SK5	PIN 1	+ Supervisory output supply (5 V @ 100 mA)
	PIN 2	- Supervisory output supply (5 V @ 100 mA)
SK7	PIN 1	+ Fan's power source (12 V @ 500 mA)
	PIN 2	- Fan's power source (12 V @ 500 mA)

Mating Connectors

SK3	Molex: 22-01-1084 PINS: 08-70-0057
SK4	Molex 22-01-3027 PINS: 08-50-0114
SK5	Molex 22-01-3027 PINS: 08-50-0114
SK7	Molex 22-01-3027 PINS: 08-50-0114

NOTES

- Specifications subject to change without notice.
- All dimensions in inches (mm), tolerance ±.02".
- Specifications are at factory settings.
- To enable normally closed remote inhibit, cut jumper J1
- Mounting maximum insertion depth is 0.15".
- Warranty: 1 year
- Weight: 3.1 lb. / 1.41 kg