

# 350 Watts LPQ350 Series

**Total Power:** 350 Watts  
**Input Voltage:** 85-264 VAC  
 120-300 VDC  
**# of Outputs:** Quad



## Electrical Specs

### Input

Input range	85-264 VAC; 120-300 VDC
Frequency	47-440 Hz
Inrush current	38 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: 350 W with 30 CFM forced air, (-C) (-CF) (-CEF)
Adjustment range	± 5% min. on main: 3.3-24 V on output 4
Supervisory output	5 V @ 500 mA regulated, 12 @ 150 mA x2
Hold-up time	20 ms @ 350 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.

### Logic Control

Power failure	TTL logic signal goes high 50-150 msec after 5 V 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 connection

## Special Features

- Active power factor correction
- IEC EN61000-3-2 compliance
- Remote sense on 1st and 4th output
- Power fail and remote inhibit
- Single wire current sharing
- Built-in EMI filter
- Adjustable floating 4th output
- 2 Supervisory output 5 V and 12 V
- Overvoltage protection
- Overload protection
- Thermal overload protection
- DC power good
- 135 khz switching frequency
- Cover -C
- Optional with fan cover -CF
- Optional end-mounted fan -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

## Safety

<b>VDE</b>	0805/EN60950 (IEC950)	21310-3336-0001
<b>UL</b>	UL1950	E186249
<b>CSA</b>	CSA 22.2-234 Level 5	LR109492C
<b>NEMKO</b>	EN 60950/EMKO-TUE	P97102061 (74-sec) 203
<b>CB</b>	Certificate and report	4048, 4049
<b>CE</b>	Mark (LVD)	

rev 12.10.03

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## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with 30 CFM Forced Air	Peak Load <sup>a</sup>	Regulation <sup>a</sup>	Ripple P/P (PARD) <sup>b</sup>
LPQ352-C	+5 V	5 A	50 A	60 A	±2%	50 mV
	+12 V	0 A	12 A	14 A	±3%	120 mV
	-12 V	0 A	6 A	8 A	±3%	120 mV
	3.3-24 V	*1 A	6 A	8 A	±3%	240 mV, max.
LPQ353-C	+5 V	5 A	50 A	60 A	±2%	50 mV
	+15 V	0 A	12 A	14 A	±3%	150 mV
	-15 V	0 A	6 A	8 A	±3%	150 mV
	3.3-24 V	*1 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 3.3-24 V factory set at 5 V.
- \* Minimum load required when the output is set below 5 volts.
- 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.
- Remote inhibit resets OVP latch

Note: -CF suffix added to the model number indicates cover with fan,  
-CEF suffix added to model number indicates end-mounted fan chassis.

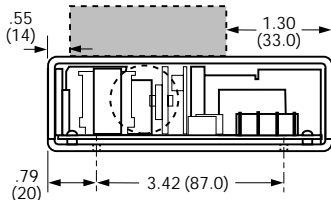
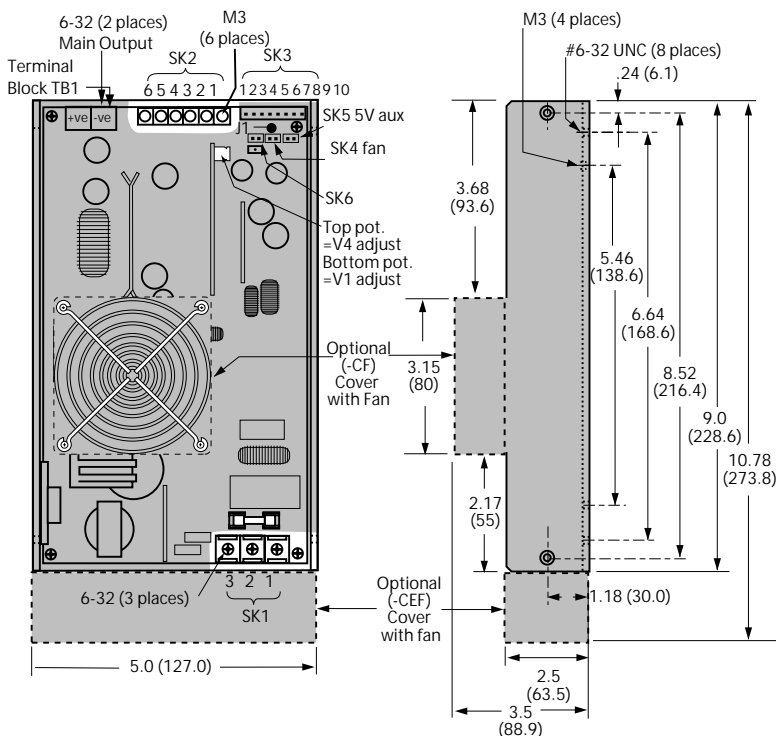
## Pin Assignments

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	3.3-25 V RET Float
	PIN 6	3.3-25 V Float
SK3	PIN 1	+ Sense V 4
	PIN 2	- Sense V 4
	PIN 3	+Sense V 1
	PIN 4	-Sense V 1
	PIN 5	POK
	PIN 6	C.Share
	PIN 7	DC-OK
	PIN 8	Inhibit (N.O.)
	PIN 9	Inhibit (N.C.)
	PIN 10	COM
SK4	PIN 1	+ Fan 1 (12V@150mA)
	PIN 2	- Common
SK5	PIN 1	+ 5V aux (5V@100mA)
	PIN 2	- Common
SK6	PIN 1	+ Fan 2 (12V@150mA)
	PIN 2	- Common

### 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
SK6	Molex 22-01-3027 PINS: 08-50-0114

Astec Connector Kit #70-841-011, includes all of the above.



### 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 0.12".
- Warranty: 1 year
- Weight: 4 lb. / 1.8kg.