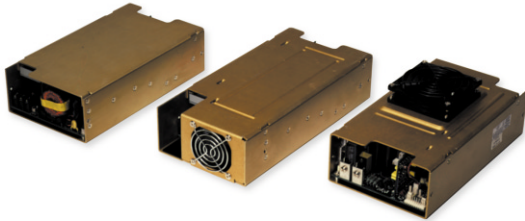


# 350 Watts LPQ350 Series

**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<br>CISPR 22 Class B conducted and radiated<br>EN55022 Class B conducted and radiated<br>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.                   |

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 3.3-24 V factory set at 5 V.
5. \* Minimum load required when the output is set below 5 volts.
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.
7. 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.

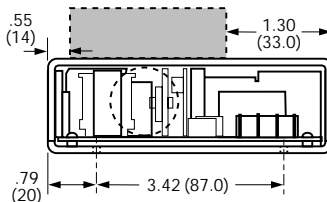
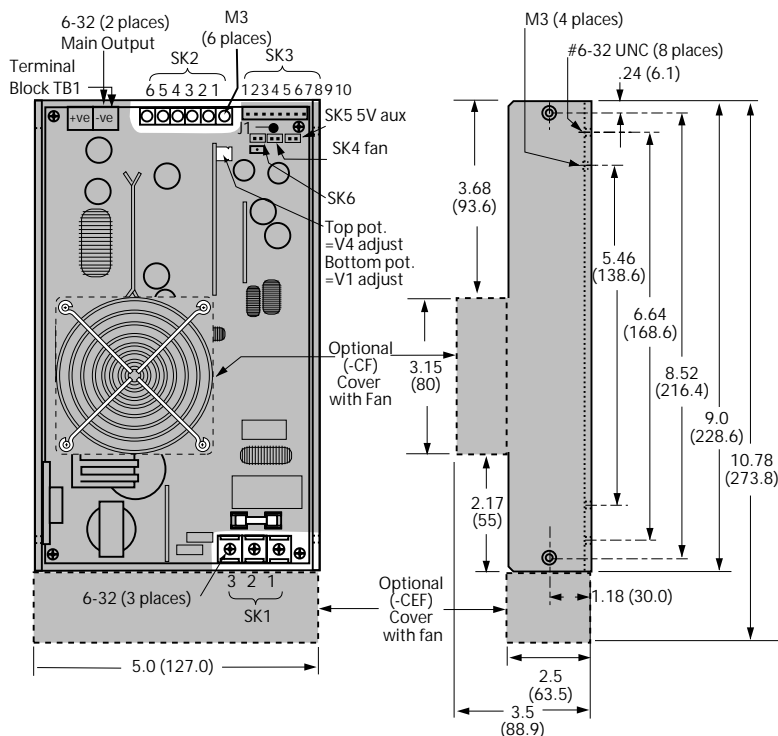
## Pin Assignments

|     |        |                     |
|-----|--------|---------------------|
| 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:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance ±.02".
3. Specifications are at factory settings
4. To enable normally closed Remote Inhibit, cut Jumper J1.
5. Mounting maximum insertion depth is 0.12".
6. Warranty: 1 year
7. Weight: 4 lb. / 1.8kg.