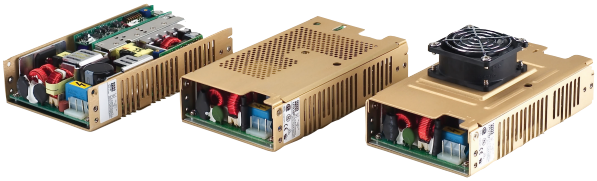
145 Watts
LPQ142 Series

Total Power:	110-145 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
- Adjustable floating 4th output
- Optional cover (-C suffix)
- Optional fan cover (-CF suffix)

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 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

Electrical Specs

Input

Input range	85-264 VAC, 120-300 VDC
Frequency	47-63 Hz
Inrush current	38 A max, cold start @ 25°C
Efficiency	75% typical at full load
EMI filter	Meets FCC Class B conducted 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

Maximum power	80 W convection (60 W with cover-C) 145 W with 30 CFM forced air (100 W with cover-C)
Adjustment range	3.3 - 5.5V on main; -12 - 15V on 3rd output 3.3 - 25 V on 4th output
Hold-up time	20 ms @145 W load at nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating
Overvoltage protection	Tracks outputs 1, 3 & 4; 10 to 35%

Logic Control

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
Remote inhibit	TTL High disables output. Contact closure causes outputs to "bounce"
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 output is in regulation. It goes low when there is a loss of regulation

Safety

VDE	60950
UL	60950
CB	Certificate and report
CSA	60950
CE	Mark (LVD)
NEMKO	EN 60950/EMKO-TUE

Technical Support: (888) 41-ASTEC or (407) 241-2752
Americas: (760) 930-4600 Europe (UK) 44 (1384) 842-211 Asia (HK) 852-2437-9662

ASTEC
rev 08.24.04

AMERICAS
5810 Van Allen Way
Carlsbad, CA 92008
Telephone: 760-930-4600
Facsimile: 760-930-0698

EUROPE
Astec House, Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX, UK
Telephone: 44 (1384) 842-211
Facsimile: 44 (1384) 843-355

ASIA
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

Model Number	*Output Voltage*	*Minimum Load*	*Maximum Load with Convection Cooling*	*Maximum Load with 30 CFM Forced Air*	*Peak Load*	*Regulation[2]*	*Ripple P/P(PARD)[3]*
LPQ142	5 V (3.3 - 5.5 V)	0 A	12 A	25 A	27 A	±2%	50 mV
	12 V	0 A	5 A	6 A	9 A	±3%	120 mV
	-12 V (-12 -15 V)	0 A	1 A	1.5 A	2 A	±3%	<1%
	±3.3-25 V	0.5 A	1.5 A	4.5 A	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 µF 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.
-CF suffix added to the model number indicates fan cover option.

Pin Assignments

Connector	LPQ142	
SK1	PIN 1	GROUND
	PIN 3	NEUTRAL
	PIN 5	LINE
SK2	PIN 1	+12 V
	PIN 2	COMMON
	PIN 3	-12 V
	PIN 4	COMMON
	PIN 5	+5 V to +25 V (Float)
	PIN 6	COMMON (Float)
SK4	TB-1	COMMON
	TB-2	+5 V
SK6	PIN 1	N/C
	PIN 2	DC OK
	PIN 3	N/C
	PIN 4	V1 SWP
	PIN 5	Common
	PIN 6	+V1 sense
	PIN 7	Sense common
	PIN 8	+ inhibit
	PIN 9	- inhibit
	PIN 10	Power fail

Mating Connectors

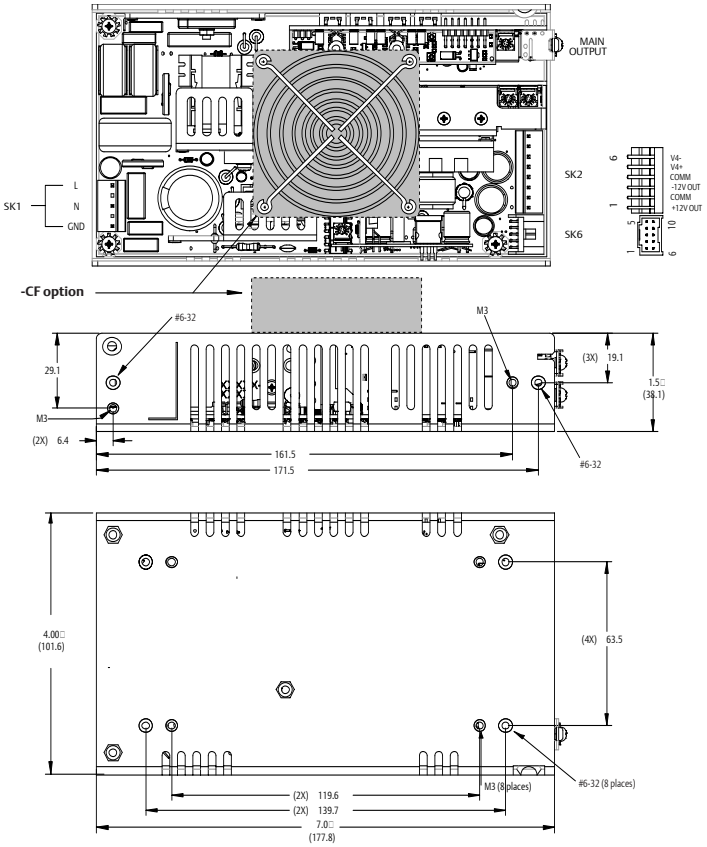
(SK1) AC Input:
Molex 09-50-8051 (USA)
Molex 09-91-0500 (UK)
PINS: 08-58-0111

(SK2) Aux DC Output:
Molex 09-50-8061 (USA)
Molex 09-91-0600 (UK)
PINS: 08-58-0111

(SK6) Control Signals:
Molex 90142-0010 (USA)
PINS: 90119-2110 or
Amp: 87977-3
PINS: 87309-8

(SK4) Main output:
Molex BB-124-08

Astec connector kit #70-841-017, includes al of the above.



Notes:

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: 1.63 lb / 0.74 kg