

## LPS360-M Series

360 Watt AC-DC Power Supply

### Low Power Data Sheet

**Total Power:** 200 - 360 W  
**Input Voltage:** 90 - 264 Vac  
 120 - 300 Vdc  
**Outputs:** Single

### SPECIAL FEATURES

- Medical and ITE safeties
- Active power factor correction
- 3" x 5" footprint
- Less than 1U high
- EN61000-3-2 compliant
- Remote sense
- Power fail
- Adjustable main output
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection
- Isolated 12 V fan output
- LPX200 enclosure kit available
- 5 V Standby output
- Remote Inhibit
- PMBus commands
- Digital I<sup>2</sup>C interface
- Class I and Class II approved
- Dual AC fuses

### SAFETY

- TUV 60950, 60601-1
- UL 60950, 60601-1
- cULus 60950, 60601-1
- CB Certificate & report
- CE Mark (LVD)
- CCC Approval



### Electrical Specifications

Input	
Input range:	90 - 264 Vac; 120 - 300 Vdc
Frequency:	47 - 63 Hz
Inrush current:	50 A max., cold start @ 25 °C
Efficiency:	Up to 92% at full load
EMI/RFI:	FCC Class B conducted; CISPR22 Class B conducted; EN55022 Class B conducted; VDE0878PT3 Class B conducted
Power factor:	0.99 typical
Safety ground leakage current:	175 uA at 132 Vac, 60 Hz for class I, 100 uA @ 264 Vac, 60 Hz for class II
Output	
Maximum power:	200 - 240 W (see de-rating) for convection, 360 W with 400 LFM of forced air
Adjustment range:	12 V and 24 V models, -0%, +15%, 15 V and 48 V models, -5%, +10%
Standby output:	5 V @ 1A convection, 2 A with forced air
Fan output:	12 V @ 0.5 A convection, 1 A forced air
Hold-up time:	25 ms @ 200 watts, 12 ms @ 360 watts, 120 Vac input
Overload protection:	Short circuit protection on all outputs. Case overload protected @ 110 - 160% above rating
Overvoltage protection:	15 - 50% above nominal output
Logical Control	
Power failure:	Open collector logic signal goes high 100 - 500 msec after main output; it goes low at least 6 msec before loss of regulation
Remote sense:	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

## Environmental Specifications

<b>Operating temperature:</b>	0° to 50 °C ambient derate each output as 2.5% per degree from 50° to 70 °C. -20 °C start up
<b>Storage temperature:</b>	-40 °C to +85 °C
<b>Electromagnetic susceptibility:</b>	Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3
<b>Humidity:</b>	Operating; non-condensing 10% to 95% RH
<b>Vibration:</b>	IEC68-2-6 to the levels of IEC721-3-2
<b>MTBF calculated:</b>	1 million hours at full load and 25 °C ambient conditions. 230 Vac input, Bellcore

## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with Forced Air	Peak Load	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
LPS363-M	12 V	0 A	20 A	30 A	39 A	±2%	120 mV
LPS364-M	15 V	0 A	16 A	24 A	31 A	±2%	150 mV
LPS365-M	24 V	0 A	10 A	15 A	19.5 A	±2%	240 mV
LPS368-M	48 V	0 A	5 A	7.5 A	9.75 A	±2%	480 mV

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 (tantalum capacitor) in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

## Pin Assignments

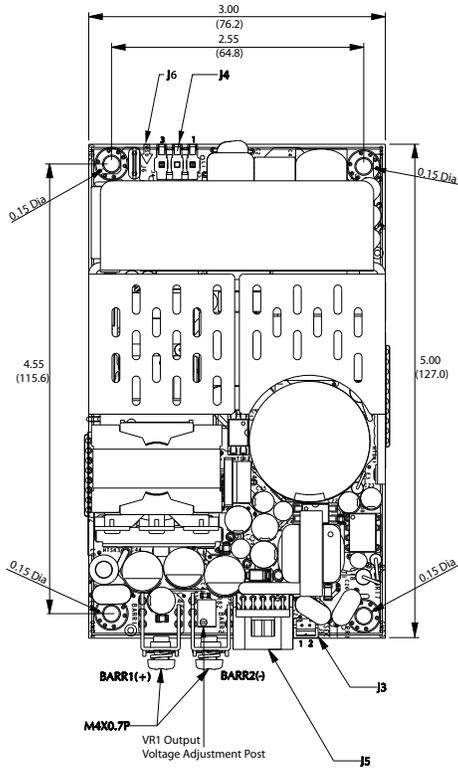
Connector	LPS360-M	
J4	Pin 1	Neutral
	Pin 3	Line
Barr	Barr-1	Main output +
	Barr-2	Main output common
J5	Pin 1	+V1 Remote sense
	Pin 2	-V1 Remote sense
	Pin 3	+5 V Standby
	Pin 4	5 V Standby return
	Pin 5	+Power fail
	Pin 6	Forced air operation
	Pin 7	Inhibit
	Pin 8	GND
	Pin 9	SDA
	Pin 10	SCL
J3	Pin 1	+12 V Fan
	Pin 2	12 V fan Return (isolated)

## Mating Connectors

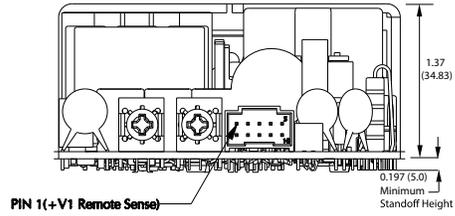
J4 AC Input	Molex 09-50-3031 (connector) PINS: 08-52-0072
J6 AC Ground	Molex 01-90020001
DC Output (Barr)	Molex 19141-0058/0063 or 19099/0048 Spade lug based on Cable Ampacity/AWG
Control Signals J5	Molex 90142-0010 (USA) PINS: 90119-2110 or Amp: 87977-3 PINS: 87309-8
J3 Fan Output	Molex 51065-0200 Pins: 50212-8100
The Artesyn Connector Kit #70-841-029, includes all of the above.	

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±0.02"(±0.5 mm)
3. Mounting holes MH1 and MH2 should be grounded for EMI purposes.
4. Mounting hole MH1 is safety ground connection.
5. Specifications are for convection rating at factory settings at 115 VAC input, 25 °C unless otherwise stated.
6. This power supply requires mounting on metal standoffs 0.20" (5m) in height.
7. For forced air operation connect pin 6 to pin 8 of J5
8. Warranty: 2 years
9. Weight: 0.75 lb/0.34 kg

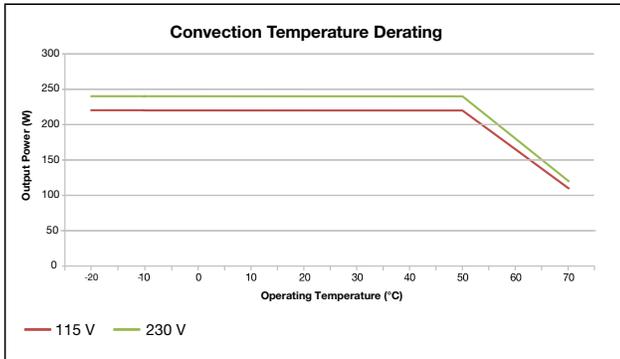
Mechanical Drawings



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