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# LPS350 Series

350 Watts

Total Power: 350 Watts Input Voltage: 85-264 Vac 120 - 300 Vdc

# of Outputs: Single





# **Special Features**

- Active power factor correction
- IEC EN61000-3-2 compliance
- Remote sense on
- 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
- 130 KHz switching frequency
- Optional with fan cover -CF
- Cover -C
- Optional end-mounted fan -CEF

# Safety

**VDE** 0805/EN60950 (IEC950)

21310-3336-0001

**UL** UL1950 El86249

**CSA** CSA 22.2-234 Level 5

LR109492C

**NEMKO** EN 60950/EMKO-TUE

P98102115 (74-sec) 203

**BABT** EN60950/BS7002 608857,

608858, 609097

**CB** Certificate and report

5734, 6280, 6281

**CE** Mark (LVD)

# **Electrical Specifications**

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 0.5 mA @ 50/60 Hz, 264 VAC input

leakage current

Output

Maximum power With cover: 350 W with 30 CFM forced air, (-C) (-CF) (-CEF)

Adjustment range 2:1 wide ratio

Supervisory output 5 V @ 500 mA regulated, 12 @ 150 mA x2

Hold-up time 20 ms @ 350 W load, 115 VAC nominal line at factory voltage settings 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 models 10% to 25% above nominal output





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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 connected. Reverse connection protected

# **Environmental Specifications**

Operating temperature: 0° to 50°C ambient;

derate each output at 2.5% per degree from 50° to 70 °C

Storage temperature: -40 °C to +85 °C

Temperature coefficient: ± 0.4% per °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 5Hz to 500Hz,

operational

MTBF demonstrated: > 550,000 hours at full load and 25 °C ambient conditions

Ordering	Ordering Information							
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>		
LPS352-C	5 V (3 - 6 V)	0 A	70 A	80 A	± 2%	50 mV		
LPS353-C	12 V (6 - 12 V)	0 A	29.2 A	33 A	± 2%	120 mV		
LPS354-C	15 V (12 - 24 V)	0 A	23.3 A	26 A	± 2%	150 mV		
LPS355-C	24 V (24 - 48 V)	0 A	14.6 A	16 A	± 2%	240 mV		

- 1. Peak current lasting < 30 seconds with a maximum 10% duty cycle.
- 2. At 25  $^{\circ}$ 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  $\mu F$  in parallel with a 0.1  $\mu F$  capacitor at rated line voltage and load ranges.
- 4. 4th output 3.3 24 V factory set at 5 V.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.
- 5. Output voltage adjustment requires a 1A load.
- 6. 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
SK3	PIN 1	N/C
	PIN 2	N/C
	PIN 3	+ Sense
	PIN 4	- Sense
	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	<ul><li>Common</li></ul>
SK5	PIN 1	+ 5V aux

SK5 PIN 1 + 5V aux (5V@100mA)
PIN 2 - Common
SK6 PIN 1 + Fan 2

PIN 2 – Common

(12V@150mA)

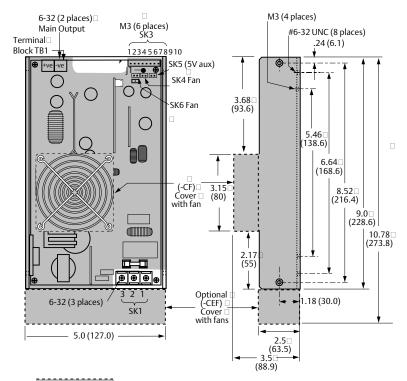
### Mating Connectors

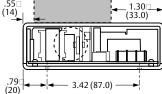
mating connectors				
SK3	Molex: 22-01-1104			
	PINS: 08-70-0057			
SK4	Molex 22-01-3027			
	PINS: 08-50-0114			
SK5	Molex 22-01-3027			
	PINS: 08-50-0114			
SK6	Molex 22-01-3027			
	PINS: 08-50-0114			

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

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# Mechanical Drawing





#### Notes:

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is ± .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: 2 year7. Weight: 3.6 lb. / 1.64 kg.

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