

# ARTESYN LPS25 SERIES

25 Watts



XXXX

#### **DATA SHEET**

#### **Total Power:**

25 - 40 Watts

## **Input Voltage:**

85 - 264 Vac 120 - 300 Vdc

## # of Outputs:

Single

#### **SPECIAL FEATURES**

- Universal input
- 3" x 5" footprint
- Less than 1U high
- Remote sense
- Built-in EMI filter
- Low output ripple
- Adjustable output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX40 enclosure kit available
- RoHS compliant
- Two year warranty

#### **SAFETY**

■ TUV 60950

11774-3336-1241 (LC#84936)

■ cUL 60950

■ CSA CSA 22.2-234 Level 3

LR53982C

■ NEMKO EN 60950/EMKO-TUE

P95100442 (74-sec) 203

■ CB Certificate and report

1577, 1578, 1579, 1580

■ CE Mark (LVD)

# **ELECTRICAL SPECIFICATIONS**

Input		
Input range	85 - 264 Vac; 120 - 300 Vac	
Frequency	47 - 440 Hz	
Inrush current	<15 A peak @ 115 Vac; <30 A peak @ 230 Vac, cold start @ 25 °C	
Input current	1 A max. (RMS) @ 115 Vac	
Efficiency	70% typical at full load	
EMI filter	FCC Class B conducted; CISPR 22 Class B conducted; EN55022 Class B conducted	
Safety ground leakage current	<0.5 mA @ 50/60 Hz, 264 Vac input	
Output		
Maximum power	25 W for convection; 40 W with 30CFM forced air	
Adjustment range	-5, +10% minimum	
Hold-up time	20 ms @ 25 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 to 6.7 Vdc. Other outputs 10% to 25% above nominal output	
Remote sense	Compensates for 0.5 V lead drop minimum Will operate without remote sense connected Reverse connection protected	

# **ENVIRONMENTAL SPECIFICATIONS**

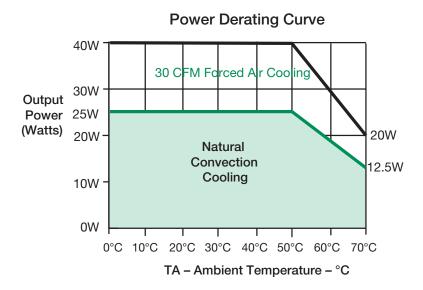
Operating temperature	0° to 50°C ambient. Derate each output 2.5% per degree from 50° to 70°C, -20°C start up.	
Storage temperature	-40°C to +85°C	
Electromagnetic susceptibility	Designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3	
Humidity	Operating; non-condensing 5% to 95% RH	
Vibration	Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75 G peak 5 Hz to 500 Hz, operational	
MTBF demonstrated	>550,000 hours at full load and 25°C ambient conditions	



## **ORDERING INFORMATION**

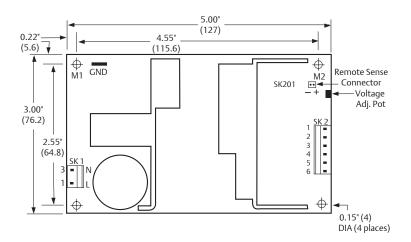
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
LPS22	5V	0A	5A	8A	9A	±2%	50 mV
LPS23	12V	0A	2.1A	3.3A	3.7A	±2%	120 mV
LPS24	15V	0A	1.7A	2.7A	3A	±2%	150 mV
LPS25	24V	0A	1.1A	1.8A	1.9A	±2%	240 mV

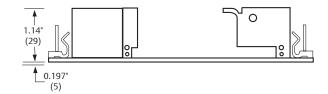
- 1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
- 2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
- 3. Peak-to-peak with 20 MHz bandwidth and 10  $\mu$ F in parallel with a 0.1  $\mu$ F capacitor at rated line voltage and load ranges.
- 4. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.





# **MECHANICAL DRAWING**





# **PIN ASSIGNMENTS**

Connector	LPS22	LPS23	LPS24	LPS25
SK1-1	Line	Line	Line	Line
SK1-3	Neutral	Neutral	Neutral	Neutral
SK2-1	+5 V	+12 V	+15V	+24V
SK2-2	+5 V	+12 V	+15V	+24V
SK2-3	+5 V	+12 V	+15V	+24V
SK2-4	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common
SK2-6	Common	Common	Common	Common
SK201-1	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-Sense	-Sense	-Sense

# **MATING CONNECTORS**

AC Input	Molex 09-50-8031 (USA) 09-93-0300 (UK) PINS: 08-52-0113
DC Outputs	Molex 09-50-8061 (USA) 09-93-0600(UK) PINS: 08-52-0113
Remote Sense	Molex 22-01-2025 PINS: 08-52-0123
Astec Connector Kit #70-841-006, includes all of the above	

<sup>1.</sup> Specifications subject to change without notice.



<sup>2.</sup>All dimensions in inches (mm), tolerance is ±0.02" (±0.5mm)
3.Mounting holes M1 and M2 should be grounded for EMI purposes.
4.Mounting hole M1 is safety ground connection.

 $<sup>5.</sup> Specifications \ are for \ convection \ rating \ at \ factory \ settings \ at \ 115 \ VAC \ input, 25 ^{\circ}C \ unless \ otherwise \ stated.$ 

<sup>6.</sup>Warranty: 2 year 7.Weight: 0.5lbs/0.23kg



#### **ABOUT ADVANCED ENERGY**

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

## PRECISION | POWER | PERFORMANCE

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