

# Switch Mode Power Supplies Single Output AC/DC Power Supply with PFC

# **AWSP150-5**

### **Description:**

The AWSP150-5 is a single output power supply. This power supply is designed for a wide variety applications where high reliability is desired, including applications for the industrial and telecommunications markets. Excellent performance specifications are provided, together with compliance to European EMC (EN55022, Class B and EN61000-3-2), and Low Voltage directive (TUV EN60950).

## Specifications (@25C)

## **Input Characteristics:**

Input Voltage:88-264VacInput Frequency Range:47-63Hz

Max Input Current: 2.7A @ Vin (rated)

Max Inrush Current: 20A@110Vac, 40A@220Vac at cold start

Power Factor: >0.92

Leakage Current: <3.5mA/240Vac

## **Output Characteristics:**

**Output Voltage:** 5Vdc **Output Current:** 30.0A **Output Power:** 150W Adjustable Output Range: ±10% Ripple & Noise: 150mV Load Regulation: ±1.0% Line Regulation: ±0.5% Efficiency: 75%

 Temperature Drift:
 <0.03%/°C (10-50°C)</td>

 Start-up Time:
 300ms max @ 230VAc

Hold-up Time:20ms min, 100% Load@230VacRise-up Time:600ms max, 100% Load@230Vac

Over Current Protection: At 105%<Load<150%

Over Voltage Protection: At 125%<Load<145%@I/P:115/230VAC. Reset by recycle AC

ON/OFF

## **General Specifications:**

Switching Frequency: 134kHz (PWM) / 67kHz (PFC)
Dimension (LxWxH): 199x98x42

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Weight: 560g net, 610g gross
Cooling: Natural Convection

**Isolation Resistance:** I/P—O/P, I/P—FG, O/P—FG: 500VDC/100Mohms

**Dielectric Strength:** I/P—O/P: 3KVac; I/P—FG: 2.5KVac; O/P—FG: 0.5KVac 1 min

Warranty: 2 years

## **Environmental Specifications:**

Operating Temperature: -10° to 60°C

Operating Humidity: 20 to 90% RH, non-condensing

Storage Temperature: -25 to 75°C

Storage Humidity: 10 to 95% RH, non-condensing

Vibration: 10-55Hz, 2G 1min/cycle, period of 60min, each X, Y & Z axis

## **EMC & Safety Specifications:**

EMC Emissions: Conforms to EN55022, VCCI, CISPR22 Class B (Conducted &

Radiated); IEC-61000-4-2, 61000-4-4, 61000-4-5, 61000-4-11 ESD Susceptibility: EN61000-4-2 (15kV/8kV)

Radiated Susceptibility: EN61000-4-3 (3Vm<sup>-1</sup>)
Fast Burst: EN61000-4-4 (2kV)
Surge: EN61000-4-5 (1kV/2kV)
Safety Approval: UL 60950 (UL File No: E204980)
TUV EN60950 (TUV No: 50058679)



Web: www.TriadMagnetics.com Phone 951-277-0757

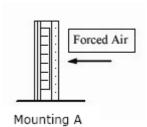
Fax 951-277-2757

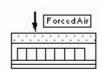
22520B Temescal Canyon Road Corona, California

92883

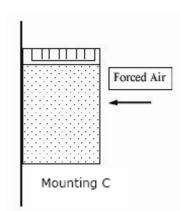
Release Date: March 13, 2006 Revision: A







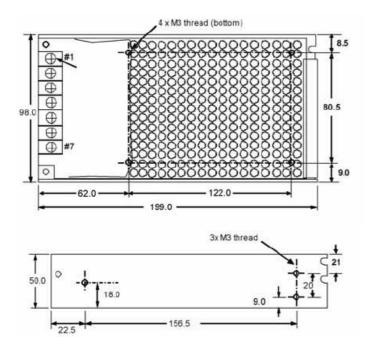
Mounting B





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## **Outline Dimensions (mm):**



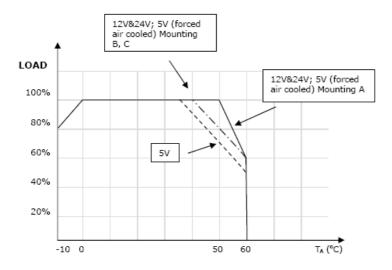
#### TERMINAL SCREW ASSIGNMENT

#1,2: AC INPUT

#3 : FG #4,5 : DC OUTPUT -V # 6,7: DC OUTPUT +V

Unit: mm Tolerance: +/-1.0mm

## **Derating Curve:**



## **Connector Types:**

**Input: Screw Terminals Output: Screw Terminals** 

RoHS Compliance: This power supply meets the requirements 2002/95/EC, know as the RoHS initiative.

\* Upon printing, this document is considered "uncontrolled". Please contact Triad Magnetics' website for the most current version.

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