

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

# AWSP150-12

#### **Description:**

The AWSP150-12 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: 88-264Vac Input 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 <3.5mA/240Vac Leakage Current:

#### **Output Characteristics:**

**Output Voltage:** 12Vdc **Output Current:** 12.5A 150W Output Power: Adjustable Output Range: ±10% Ripple & Noise: 180mV Load Regulation: +0.5% Line Regulation:  $\pm 0.5\%$ Efficiency: 80%

**Temperature Drift:** <0.03%/°C (10-50°C) Start-up Time: 300ms max @ 230VAc

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

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

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

ON/OFF

#### **General Specifications:**

Switching Frequency: 134kHz (PWM) / 67kHz (PFC)

Dimension (LxWxH): 199x98x42

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: 4.3KVdc; I/P—FG: 2.5KVac; O/P—FG: 0.5KVac

Warranty:

### **Environmental Specifications:**

**Operating Temperature:** -20° to 60°C (see derating curve) Operating Humidity: 20 to 90% RH, non-condensing Storage Temperature: -40 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:**

Conforms to EN55022, VCCI, CISPR22 Class B (Conducted & **EMC Emissions:** Radiated); IEC-61000-4-2, 61000-4-4, 61000-4-5, 61000-4-11

EN61000-4-2 (15kV/8kV) **ESD Susceptibility:** 

Radiated Susceptibility: EN61000-4-3 (3Vm1) EN61000-4-4 (2kV) Fast Burst: Surge: EN61000-4-5 (1kV/2kV)

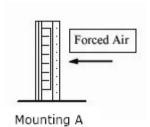
Safety Approval: UL 60950 (UL File No: E204980) TUV EN60950 (TUV No: 50058679)

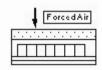




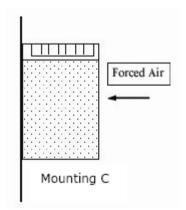
Web: www.TriadMagnetics.com Phone 951-277-0757

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Mounting B

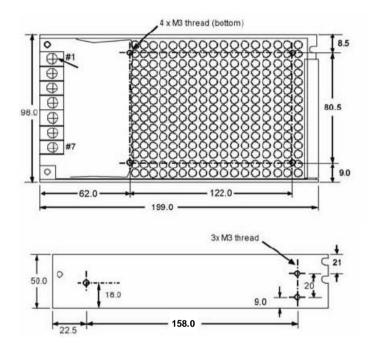


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#### **Outline Dimensions (mm):**



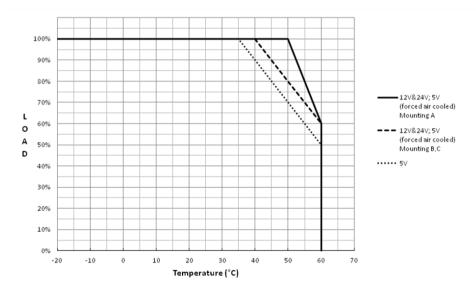
#### TERMINAL SCREW ASSIGNMENT

# 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: As of manufacturing date February 2016, all standard products meet the requirements of 2015/863/EU, known as the RoHS 3 initiative

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