

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

# **AWSP100-12**

#### **Description:**

The AWSP100-12 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.

## Specifications (@25C)

## Input Characteristics:

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

Max Input Current: 1.8A @ Vin (rated) 20A@110Vac, 40A@220Vac at cold start

**Max Inrush Current: Power Factor:** >0.92

Leakage Current: <3.5mA/240Vac

#### **Output Characteristics:**

Output Voltage: 12\/dc **Output Current:** 8.4A Output Power: 100W Adjustable Output Range: +10% Ripple & Noise: 100mV Load Regulation: ±0.5% Line Regulation: ±0.5% Efficiency: 80%

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

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

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

-O/P, I/P-FG, O/P-FG: 500VDC/100Mohms Isolation Resistance: I/P—O/P: 4.3KVdc; I/P—FG: 2.5KVac; O/P—FG: 0.5KVac **Dielectric Strength:** 

Warranty:

## **Environmental Specifications:**

-10° to 60°C **Operating Temperature:** 

**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:**

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

& Radiated); IEC-61000-4-2, 61000-4-4, 61000-4-5,

61000-4-11

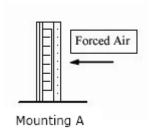
**ESD Susceptibility:** EN61000-4-2 (15kV/8kV) Radiated Susceptibility: EN61000-4-3 (3Vm1) EN61000-4-4 (2kV) **Fast Burst:** Surge: EN61000-4-5 (1kV/2kV) UL 60950 (UL File No: É204980) Safety Approval:

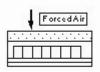


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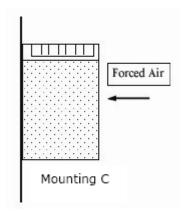
460 Harley Knox Blvd. Perris, California 92571







Mounting B

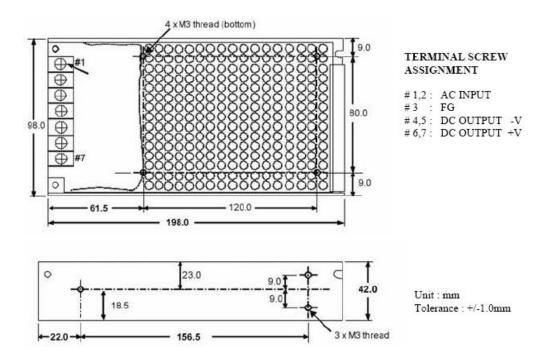


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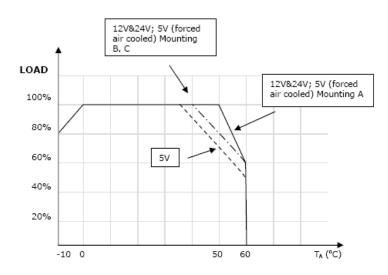


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#### **Outline Dimensions (mm):**



### **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.