

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

# AWSP100-24

#### **Description:**

The AWSP100-24 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
May Input Current: 1.84 @ Vin (ra

Max Input Current: 1.8A @ Vin (rated)

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

Power Factor:>0.92Leakage Current:<3.5mA/240Vac</th>

#### **Output Characteristics:**

24Vdc **Output Voltage: Output Current:** 4.2A Output Power: 100W Adjustable Output Range: +10% Ripple & Noise: 100mV Load Regulation: ±0.5% Line Regulation: ±0.5% Efficiency: 84%

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

 Start-up Time:
 300ms max @ 230VAc

**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

 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: 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 (3Vm¹)

 Fast Burst:
 EN61000-4-4 (2kV)

 Surge:
 EN61000-4-5 (1kV/2kV)

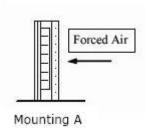
 Safety Approval:
 UL 60950 (UL File No: E204980)

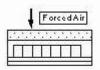


Web: www.TriadMagnetics.com Phone 951-277-0757 Fax 951-277-2757

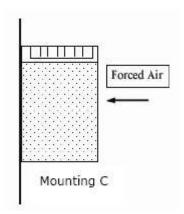
460 Harley Knox Blvd. Perris, California 92571







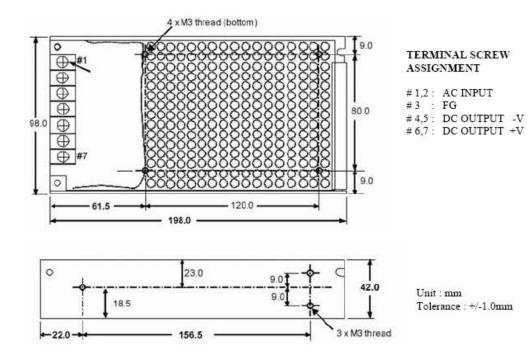
Mounting B



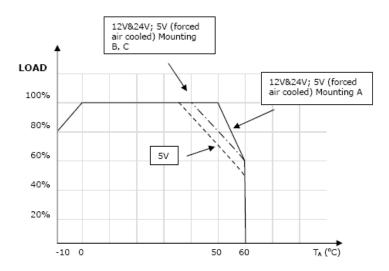


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#### **Outline Dimensions (mm):**



## **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.

Web: www.TriadMagnetics.com Phone 951-277-0757 Fax 951-277-2757

Publish Date: September 21, 2021

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