

## 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 (TUV EN60950).

### Specifications (@25C)

#### Input Characteristics:

<b>Input Voltage:</b>	88-264Vac
<b>Input Frequency Range:</b>	47-63Hz
<b>Max Input Current:</b>	1.8A @ Vin (rated)
<b>Max Inrush Current:</b>	20A@110Vac, 40A@220Vac at cold start
<b>Power Factor:</b>	>0.92
<b>Leakage Current:</b>	<3.5mA/240Vac

#### Output Characteristics:

<b>Output Voltage:</b>	12Vdc
<b>Output Current:</b>	8.4A
<b>Output Power:</b>	100W
<b>Adjustable Output Range:</b>	±10%
<b>Ripple &amp; Noise:</b>	100mV
<b>Load Regulation:</b>	±0.5%
<b>Line Regulation:</b>	±0.5%
<b>Efficiency:</b>	80%
<b>Temperature Drift:</b>	<0.03%/°C (10-50°C)
<b>Start-up Time:</b>	300ms max @ 230VAc
<b>Hold-up Time:</b>	20ms min, 100% Load@230VAc
<b>Rise-up Time:</b>	600ms max, 100% Load@230VAc
<b>Over Current Protection:</b>	At 105%<Load<150%
<b>Over Voltage Protection:</b>	At 125%<Load<145%@I/P:115/230VAC. Reset by recycle AC ON/OFF

#### General Specifications:

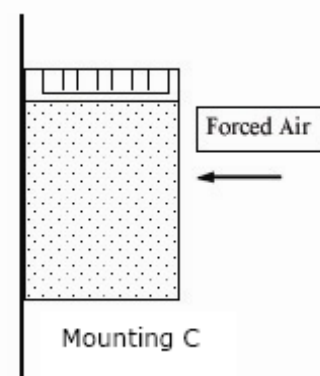
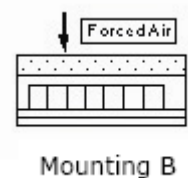
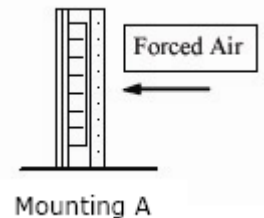
<b>Switching Frequency:</b>	134kHz (PWM) / 67kHz (PFC)
<b>Dimension (LxWxH):</b>	199x98x42
<b>Weight:</b>	560g net, 610g gross
<b>Cooling:</b>	Natural Convection
<b>Isolation Resistance:</b>	I/P—O/P, I/P—FG, O/P—FG: 500VDC/100Mohms
<b>Dielectric Strength:</b>	I/P—O/P: 3kVac; I/P—FG: 2.5kVac; O/P—FG: 0.5kVac 1 min
<b>Warranty:</b>	2 years

#### Environmental Specifications:

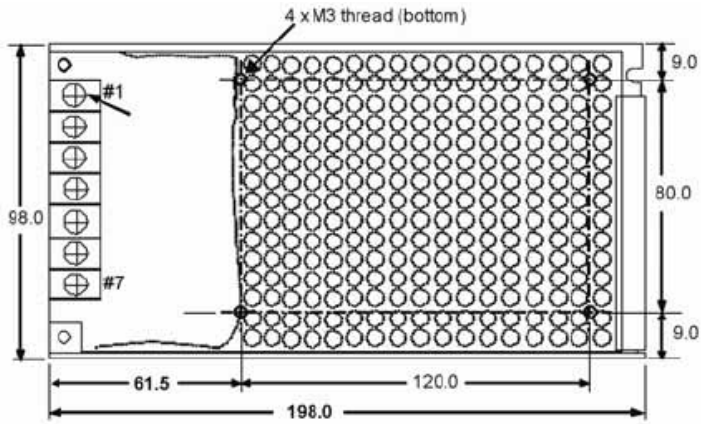
<b>Operating Temperature:</b>	-10° to 60°C
<b>Operating Humidity:</b>	20 to 90% RH, non-condensing
<b>Storage Temperature:</b>	-25 to 75°C
<b>Storage Humidity:</b>	10 to 95% RH, non-condensing
<b>Vibration:</b>	10-55Hz, 2G 1min/cycle, period of 60min, each X, Y & Z axis

#### EMC & Safety Specifications:

<b>EMC Emissions:</b>	Conforms to EN55022,VCCI,CISPR22 Class B (Conducted & Radiated); IEC-61000-4-2, 61000-4-4, 61000-4-5, 61000-4-11
<b>ESD Susceptibility:</b>	EN61000-4-2 (15kV/8kV)
<b>Radiated Susceptibility:</b>	EN61000-4-3 (3Vm <sup>-1</sup> )
<b>Fast Burst:</b>	EN61000-4-4 (2kV)
<b>Surge:</b>	EN61000-4-5 (1kV/2kV)
<b>Safety Approval:</b>	UL 60950 (UL File No: E204980) TUV EN60950 (TUV No: 50058679)

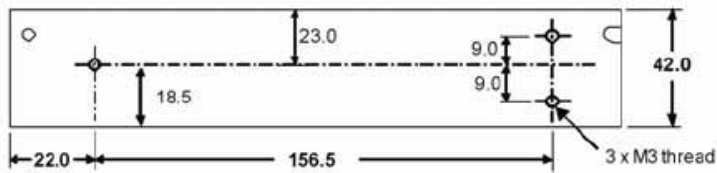


### Outline Dimensions (mm):



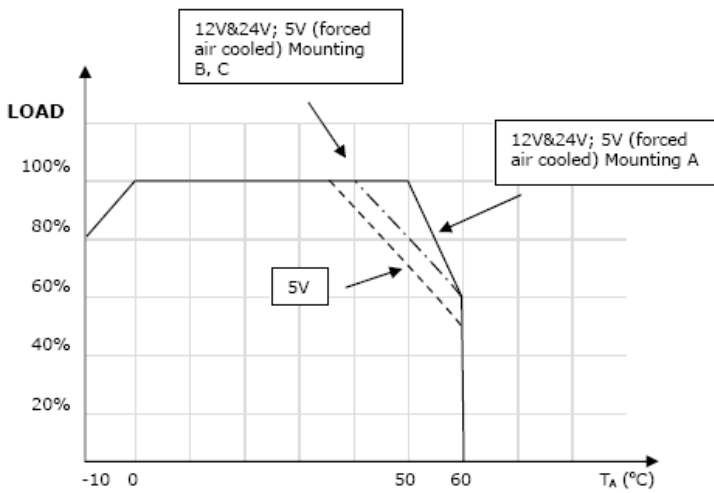
#### TERMINAL SCREW ASSIGNMENT

- # 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, known as the RoHS initiative.

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