

## 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 (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>          | 24Vdc  |
| <b>Output Current:</b>          | 4.2A   |
| <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>              | 84%  |
| <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:

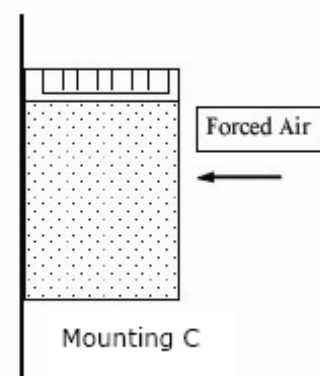
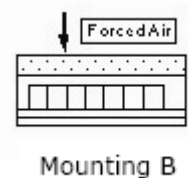
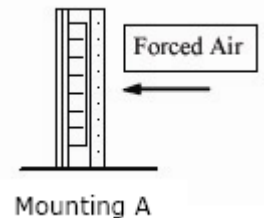
|                              |  |
|------------------------------|--|
| <b>Switching Frequency:</b>  | 134kHz (PWM) / 67kHz (PFC)                             |
| <b>Dimension (LxWxH):</b>    | 199x98x42  |
| <b>Weight:</b>               | 560g net, 610g gross                                   |
| <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:

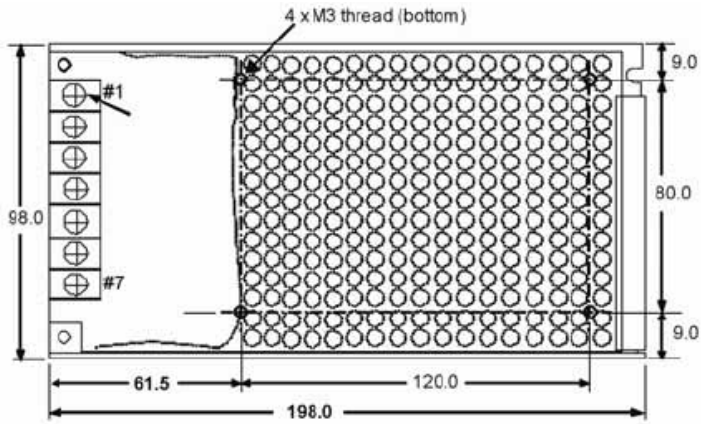
|                               |   |
|-------------------------------|---|
| <b>Operating Temperature:</b> | -10° to 60°C  |
| <b>Operating Humidity:</b>    | 20 to 90% RH, non-condensing                                |
| <b>Storage Temperature:</b>   | -25 to 75°C   |
| <b>Storage Humidity:</b>      | 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)<br>TUV EN60950 (TUV No: 50058679)   |

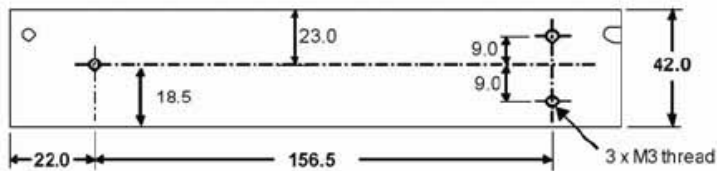


### Outline Dimensions (mm):



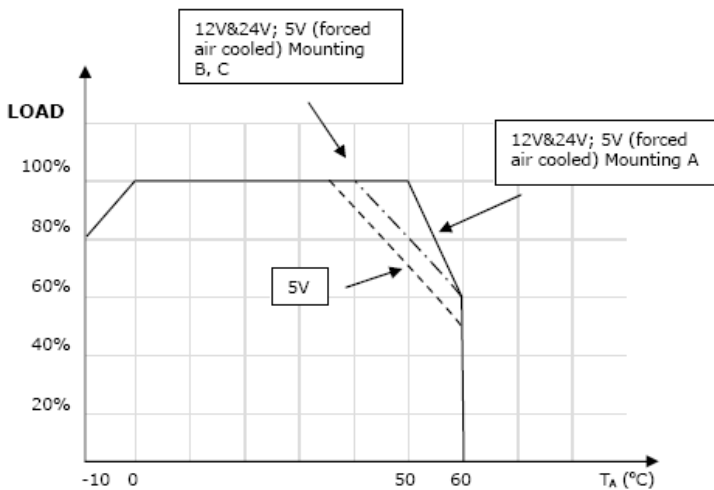
#### TERMINAL SCREW ASSIGNMENT

- # 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, know as the RoHS initiative.

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