

## AWSP60-24

### Description:

The AWSP60-24 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:

|                        |                                      |
|------------------------|--------------------------------------|
| Input Voltage:         | 85-264Vac                            |
| Input Frequency Range: | 47-63Hz                              |
| Max Input Current:     | 1.3A @ Vin (rated)                   |
| Max Inrush Current:    | 20A@110Vac, 40A@220Vac at cold start |
| Leakage Current:       | <3.5mA/240Vac                        |

#### Output Characteristics:

|                           |                                                                  |
|---------------------------|------------------------------------------------------------------|
| Output Voltage:           | 24Vdc                                                            |
| Output Current:           | 2.5A                                                             |
| Output Power:             | 60W                                                              |
| Adjustable Output Range:  | ±10%                                                             |
| Ripple & Noise:           | 100mV                                                            |
| Load Regulation:          | ±0.5%                                                            |
| Line Regulation:          | ±0.5%                                                            |
| Efficiency:               | 81%                                                              |
| Temperature Drift:        | <0.03%/°C (10-50°C)                                              |
| Start-up Time:            | 300ms max @ 230Vac                                               |
| Hold-up Time:             | 20ms min, 100% Load@230Vac                                       |
| Rise-up Time:             | 300ms max, 100% Load@230Vac                                      |
| Over Current Protection:  | At Load>120% 115/230Vac, Shutdown                                |
| Over Voltage Protection:  | Zener clamping at Vo>110%, Non auto recovery                     |
| Short Circuit Protection: | Short circuit protection available. Avoid short circuit >30 sec. |

#### General Specifications:

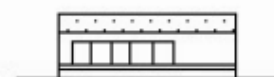
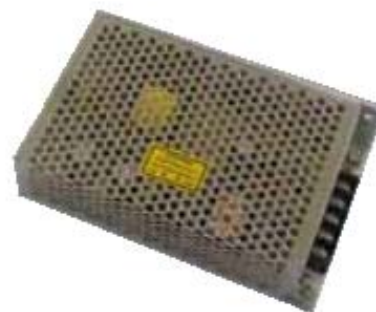
|                       |                                                        |
|-----------------------|--------------------------------------------------------|
| Switching Frequency:  | 45kHz                                                  |
| Dimension (LxWxH):    | 160x98x38mm                                            |
| Weight:               | 450g net, 490g gross                                   |
| Cooling:              | Natural Convection                                     |
| Isolation Resistance: | I/P—O/P, I/P—FG, O/P—FG: 500VDC/100Mohms               |
| Dielectric Strength:  | I/P—O/P: 3KVac; I/P—FG: 2.5KVac; O/P—FG: 0.5KVac 1 min |
| Warranty:             | 2 years                                                |

#### Environmental Specifications:

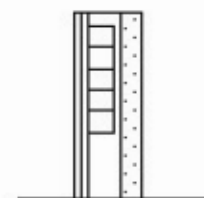
|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| Operating Temperature: | -10° to 60°C                                                |
| Operating Humidity:    | 20 to 90% 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:

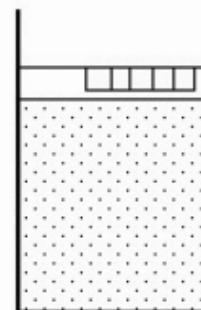
|                          |                                                                                                                  |
|--------------------------|------------------------------------------------------------------------------------------------------------------|
| EMC Emissions:           | 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 (3V/m <sup>1</sup> )                                                                                 |
| Fast Burst:              | EN61000-4-4 (2kV)                                                                                                |
| Surge:                   | EN61000-4-5 (1kV/2kV)                                                                                            |
| Safety Approval:         | UL 60950 (UL File No: E204980)<br>TUV EN60950 (TUV No: 50058679)                                                 |



Mounting A



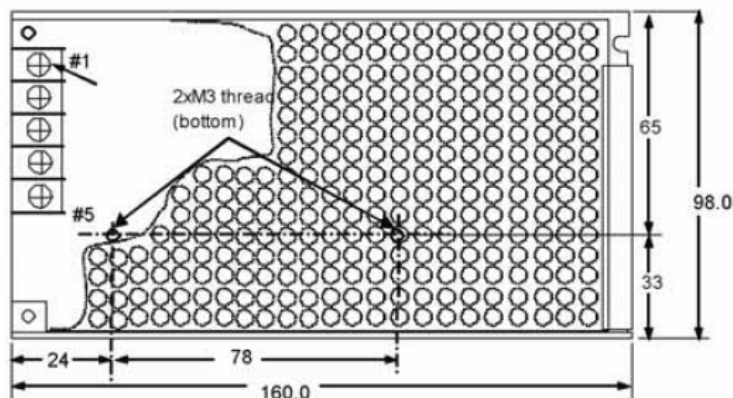
Mounting B



Mounting C

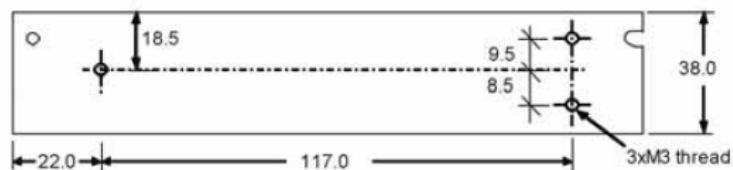


#### Outline Dimensions (mm):



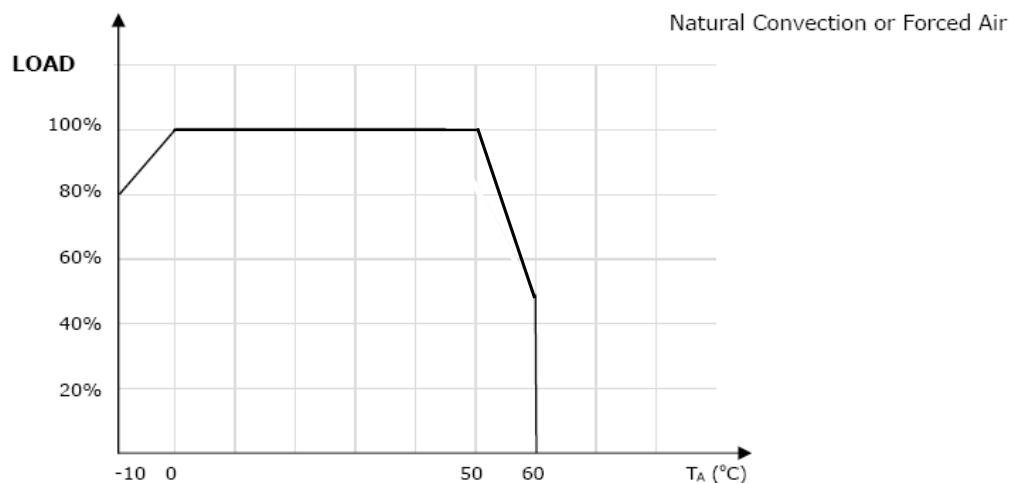
#### TERMINAL SCREW ASSIGNMENT

- # 1,2 : AC INPUT
- # 3 : FG (FRAME GROUND)
- # 4 : DC OUTPUT -V
- # 5 : 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 2005, all standard products meet the requirements of 2011/65/EU, known as the RoHS initiative.

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