

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

## **AWSP40-24**

### Description:

The AWSP40-24 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: 1.0A @ Vin (rated)

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

Leakage Current: <3.5mA/240Vac

#### **Output Characteristics:**

Output Voltage: 24Vdc **Output Current:** 1.7A Output Power: 40W 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)</td>

 Start-up Time:
 300ms max @ 230VAc

 Hold-up Time:
 30ms min, 100% Load@230Vac

Rise-up Time: 300ms max, 100% Load@230Vac
Over Current Protection: At Load>120% 115/230Vac, Auto recovery
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: 50kHz
Dimension (LxWxH): 129x98x38mm
Weight: 360g net, 400g gross
Cooling: Natural Convection

Isolation Resistance:I/P—O/P, I/P—FG, O/P—FG: 500VDC/100MohmsDielectric 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 (3Vm<sup>-1</sup>)

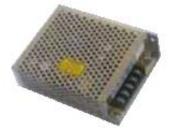
 Fast Burst:
 EN61000-4-4 (2kV)

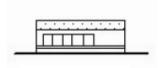
 Surge:
 EN61000-4-5 (1kV/2kV)

**Safety Approval:** UL 60950 (UL File No: É204980) TUV EN60950 (TUV No: 50058679)

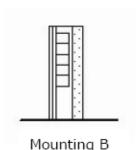


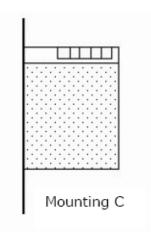






Mounting A

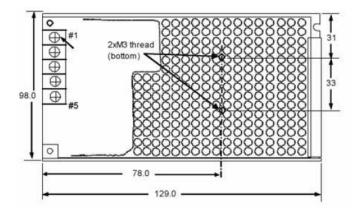






# Switch Mode Power Supplies Single Output AC/DC Power Supply

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



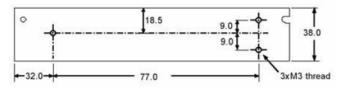
#### TERMINAL SCREW ASSIGNMENT

# 1,2 : AC INPUT

#3 : FG (FRAME GROUND)

#4 : DC OUTPUT –V

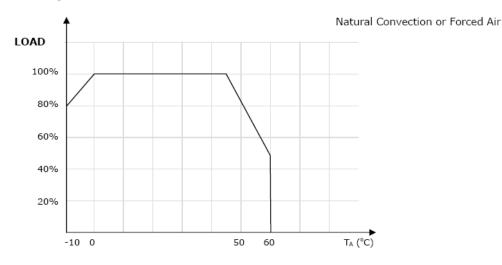
#5 : DC OUTPUT +V



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.

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

460 Harley Knox Blvd. Perris, California 92571

Publish Date: December 4, 2013