

# 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.

#### 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:**

24Vdc **Output Voltage: 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/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)

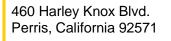
 Radiated Susceptibility:
 EN61000-4-3 (3Vm¹)

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

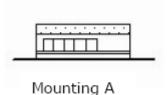
 Surge:
 EN61000-4-5 (1kV/2kV)

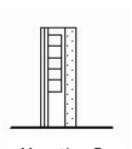
 Safety Approval:
 UL 60950 (UL File No: E204980)



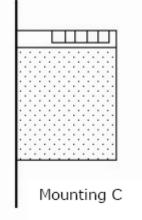








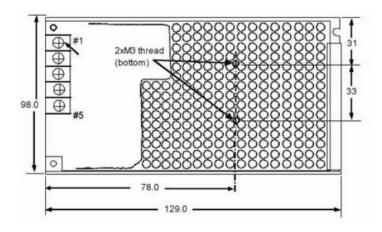






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### **Outline Dimensions (mm):**



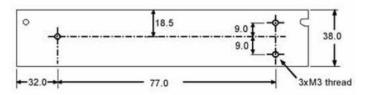
#### TERMINAL SCREW ASSIGNMENT

# 1,2 : AC INPUT

#3 : FG (FRAME GROUND)

#4 : DC OUTPUT –V

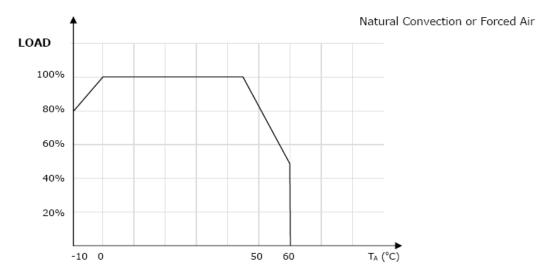
#5 : DC OUTPUT +V



Unit : mm

Tolerance: +/-1.0mm

#### **Derating Curve:**



### **Connector Types:**

Input: Screw TerminalsOutput: 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.

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