TRIAD MAGNETICS

Switch Mode Power Supplies
Single Output
AC/DC Power Supply with PFC

AWSP150-12

Description:

The AWSP150-12 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).

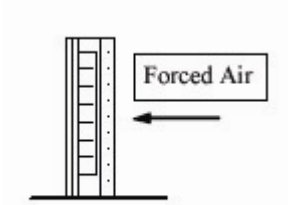
Specifications (@25C)

Input Characteristics:

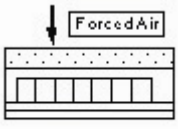
Input Voltage:	88-264Vac
Input Frequency Range:	47-63Hz
Max Input Current:	2.7A @ Vin (rated)
Max Inrush Current:	20A@110Vac, 40A@220Vac at cold start
Power Factor:	>0.92
Leakage Current:	<3.5mA/240Vac

Output Characteristics:

Output Voltage:	12Vdc
Output Current:	12.5A
Output Power:	150W
Adjustable Output Range:	±10%
Ripple & Noise:	180mV
Load Regulation:	±0.5%
Line Regulation:	±0.5%
Efficiency:	80%
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:	600ms max, 100% Load@230Vac
Over Current Protection:	At 105%<Load<150%
Over Voltage Protection:	At 125%<Load<145%@I/P:115/230VAC. Reset by recycle AC ON/OFF



Mounting A



Mounting B

General Specifications:

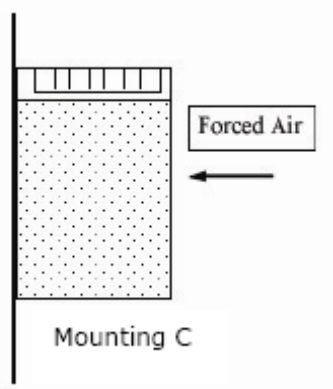
Switching Frequency:	134kHz (PWM) / 67kHz (PFC)
Dimension (LxWxH):	199x98x42
Weight:	560g net, 610g gross
Cooling:	Natural Convection
Isolation Resistance:	I/P—O/P, I/P—FG, O/P—FG: 500VDC/100Mohms
Dielectric Strength:	I/P—O/P: 3KVac; I/P—FG: 2.5KVac; O/P—FG: 0.5KVac 1 min
Warranty:	2 years

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 (3Vm^{-1})
Fast Burst:	EN61000-4-4 (2kV)
Surge:	EN61000-4-5 (1kV/2kV)
Safety Approval:	UL 60950 (UL File No: E204980) TUV EN60950 (TUV No: 50058679)



Mounting C

Web: www.TriadMagnetics.com
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22520B Temescal Canyon Road Corona, California
92883

Release Date: March 13, 2006
Revision: A

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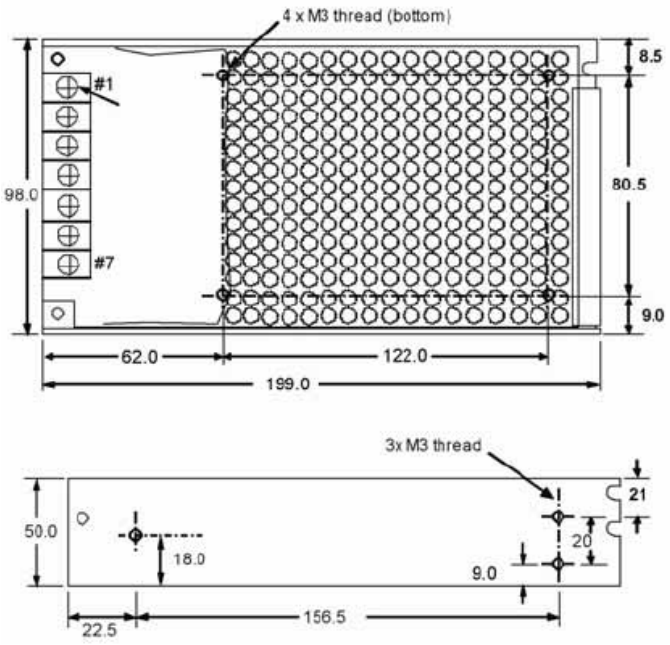
Outline Dimensions (mm):

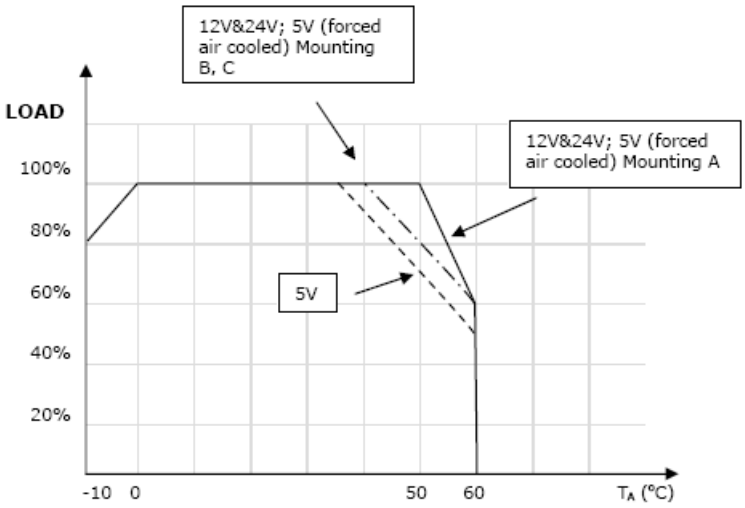


TERMINAL SCREW ASSIGNMENT

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.

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