

Source Control Document.

Model: MIW 150-48FTND (Standard ND Stock Version)
OSD No.: 1356 0694 SPND **UL Part No.:** 1356 0694
Summary description: 150W Single Output, AC/ DC Power Supply,
48V/3A



Product description:

The unit is a high-reliability rugged power converter built on 100 x 160mm PCB and installed in standard F1 package with clear mounting holes. The input accepts any AC voltage from 95V to 264V, as well as DC voltages for 110V to 360V. The cooling is combined; natural air convection and conduction via base plate. Low component count and the use of components with established reliability results in an MTBF exceeding 150,000 hours at 45°C. The unit is manufactured at our plant under strict quality controls.

SPECIFICATIONS

Input Voltage

115-240Vac (universal)
95Vac to 264 Vac range
47 – 63Hz
110 ... 360Vdc
Input Current 2.9Arms max.

Input Protection

Inrush current limiting
Varistor
Internal safety fuse
Lower voltage than the specified minimum input will not damage the unit

Isolation

2250VDC input to chassis
4300VDC input to output
8mm spacing
500VDC output to chassis

Standards

Designed to meet EN60950 and corresponding UL and CSA standards
Approved to UL60950-1

EMI

EN55022 Class B

Switching Frequency

47KHz +/- 2KHz

Hold Up Time

Min. 5ms at 115VAC input for 5% drop of the output voltage

Output Voltage/Current

48V / 3A,
Adjustable: 47.8...56.2V
Output is floating, either terminal can be grounded

Redundancy diode

Not installed

Line/Load Regulation

+/- 1% combined from zero load to full load

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

Output Ripple/Noise

Better than 70mVrms or 300mVpp (20MHz BW)

Output Overload Protection

Rectangular current limiting with hiccup type short-circuit protection
Current Limit: 3.5A +/- 0.3A

Output Overvoltage Protection

Second regulator loop, completely stable and independent of main regulator loop
OVP setting: 58V +/- 1.5V

Efficiency

min. 83% at full load

Operating Temperature Range

0 to 50°C for full specification with proper installation

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Natural convection and conduction cooling via base plate.
Size of cooling surface >8dm²

Environmental Protection

Basic ruggedizing

MTBF

150,000 hours @ 45°C

Indicators

Green 'Output ON' LED visible through the cooling slots

Control Input

None

Alarm Output

None

Package / Dimensions (WxHxL)

F1: 112mm x 50mm x 197mm
(4.5" x 2.0" x 7.8")
Mounting holes are clear

Weight

0.77kg (1.7 lb.)

Connections


9 poles barrier-type terminal block with 3/8" spacing

RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice

Drawn by SS	Date Sept. 2, 2008
Checked by TS	Drawing No./ Rev. SCD 1356 0694NDA
Approved by TS	

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