

Source Control Document.

Model: MIW 100-24FTND (Standard ND Stock Version)
OSD : 1570 0694 SPND
Summary description: 95W Single Output, AC/DC Power Supply
 24Vdc/3.95A
Customer Name: ABS ND Stock



Product description:

This unit is a high reliability rugged power converter built on 3" x 5" PCB size and installed in standard F0 package with clear mounting holes. The input accepts any AC voltage from 95V to 253V as well as DC voltage from 111V to 360V. It has combined cooling; conduction via baseplate and natural air convection. Low component count and the use of components with established reliability results in a high MTBF. The unit is manufactured at our plant under strict quality control.

Special Feature: These stock units are individually packed and ready for immediate delivery.

SPECIFICATIONS

Input Voltage

115-230Vac (-15% and +10%)
 95Vac to 253Vac
 47 – 63Hz
 111 ... 360Vdc
 Input Current 1.9A 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 EN 60950 and corresponding UL & CSA standards

EMI

EN55022 Class A as minimum

Hold Up Time

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

Switching Frequency

47kHz +/- 2kHz

Terminal Block Pin-out

DC OUTPUT			INPUT		
—	+	NOT USED	GND	(+) PH	(-) N
1	2	3	4	5	6

Output Voltages/Currents

24Vdc/3.95A
 Adjustable 23.8...28.2V (95Wmax)
 The output is floating, either terminal can be grounded

Redundancy diode

None

Line/Load Regulation

+/- 1% combined from no 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 60mVrms or 300mVpp (@ 20MHz BW)

Output Overload Protection

Rectangular current limiting with hiccup type short-circuit protection (hiccup mode)
 Current Limit: 4.5A +/- 0.3A

Output Overvoltage Protection

Double regulator loop
 OVP Setting: 30V +/- 1.5V

Efficiency

min. 80% at full load

Operating Temperature Range

0° C to +50° C for full specification with proper installation

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Natural convection and conduction via customer chassis

Environmental Protection

Basic ruggedizing

MTBF

180,000 hours @ 45°C

Indicators

None

Control Input

None

Alarm Outputs

None

Package/ Dimensions (WxHxL)

F0: 86mm x 154mm x 48mm
 (3.4" x 1.9" x 6.1")
 Mounting holes are clear

Weight

0.45 kg (1 lb)

Connections


6 pole barrier-type terminal block, with 3/8" spacing

RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice

Drawn by TS/bd	Date August 23, 2010
Checked by WA	Drawing No./ Rev. SCD 1570 0694NDA3
Approved by TS	

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