

Source Control Document.

Model: PFC 1500-24UTND (Standard ND Stock Version)
OSD: 1741 0397 + 13559406SPFC
Summary Description: 1500W, Single Output Power Supply with PFC Input, 24V/62A Output



Product description:

This rugged, industrial-quality unit is built with a combination of field-proven modules, PFQ 1500 and KFB 1500. The use of components with many years of established reliability results in a high demonstrated MTBF. It is in the standard ABSOPULSE 5" x 5" x 12" enclosure (U5512). There are four mounting M6 PEM nuts on the bottom of the chassis. The unit is manufactured, at our plant, under strict quality control.

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

SPECIFICATIONS

Input Voltage

100-240Vac +/- 10%
 (90-264VAC Universal)
 47-63Hz
 Input current: 22Arms max.

Input Power Factor:

Min. 0.98 at full load for the entire input range. Meets EN61000-3-2.

Input Protection

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

Isolation

2460VDC input to chassis
 4300VDC input to output
 8mm spacing
 500VDC output to chassis

Standards

Designed to meet EN60950 and corresponding UL & CSA Standards
 Formal approval to UL 60950-1
 CSA C22.2 No. 60950-1-3

EMI

EN55022 Class A as minimum

Hold-Up Time

Min. 10ms at any input for 5% drop of the output voltage

Switching Frequency

100KHz Boost section
 55KHz DC/DC section

Output Voltage/Current

24V +/- 0.1V / 62A
 Output is floating, either terminal can be grounded
 Adjustable 24-28V

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 50mVrms or 200mVpp (@ 20MHz BW)

Output Overload Protection

Rectangular current limiting with short-circuit protection (no hiccup)
 Thermal shutdown in case of insufficient airflow (self-resetting)
 Current Limit: 65A +/- 3A

Output Overvoltage Protection

Second regulator loop, completely stable and independent of main regulator loop
 OVP limit: 30V +/- 1.5V

Efficiency

Min. 80% at full load

Operating Temperature Range

-20°C to +50°C for full specification

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Built-in fan

Environmental Protection

Basic ruggedizing

MTBF

100,000 hours @45°C (fan not included)

Indicators

None

Alarm Output

None

Package/ Dimensions (WxHxL)

U5512: 127 x 127 x 314mm
 (5.0" x 5.0" x 12")
 See outline drawing
 Four M6 PEM nuts for mounting on the bottom of the chassis

Weight

5.2kg (11.5 lbs.)

Connections

Two pole terminal block for input and copper blocks with ¼" diameter screws for output
 M6 stud for chassis GND

RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice

Drawn by SS	Date Nov. 13, 2008
Checked by TS	Drawing No./ Rev. SCD1741 0397NDB
Approved by TS	

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