

Source Control Document.

Model: PFH 2K-28UTRC-S3700

COSD: 0N78-B1 (0N78-B2)

Summary Description: 2000W, Industrial Quality, Power Supply
Universal AC to 28Vdc /71A

Customer Name: JDGA GPS/texas

Project Name: Onrion



Product description:

This rugged, industrial quality power converter uses field proven technology to generate the required output power. It is built with two internal PFH 65F power cards. The unit is specially customized to drive a motor in a switchgear. The motor operates only for 0.75 second, then turns off. There are several minutes pause between these operations. The unit is manufactured at our plant under strict quality control.

Special Features: PFC Input, ruggedizing, Conformal coating, -20C operation. Stud boots, M5x10mm screws for L-brackets

CE Mark, CE DoC, CofC, Final Test Data

SPECIFICATIONS

Input Voltage

95-264Vac operating range, 47-63Hz

Input current: 26Arms max. during
peak full load

Power factor is min. 0.97 at full load
for the entire input range
Meets EN61000-3-2, and EN61000-3-12

Input Protection

Inrush current limiting

Varistor

Internal safety fuses

Lower voltage than the specified
minimum input will not damage the unit

Isolation

2250Vdc input to chassis

4300Vdc input to output

8mm spacing

700Vdc output to chassis

Standards

Designed to meet EN60950-1 and
related UL/CSA standards.

EMI

EN55022 Class A with margins

Switching Frequency

Input stage: 80kHz $\pm$ 5kHz

Output stage: 55kHz $\pm$ 3kHz

Output Voltage/Current

28Vdc $\pm$ 0.3V/71A continuous

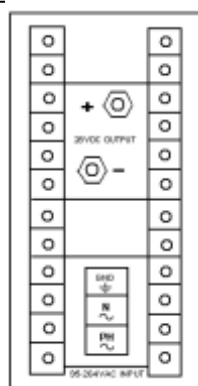
Output is floating, either terminal
can be grounded

Output Separation Diode

Installed internally for separation
of the internal modules

Line/Load Regulation

$\pm$ 1% combined from 10% load to
full load including output diodes



Dynamic Response

Ramp up to full load within
10msec max

Output Ripple/Noise

Better than 60mVrms or 300mVpp
(@ 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: 75A $\pm$ 2A

Output Over-voltage Protection

Second regulator loop, completely
stable and independent of main
regulator loop
OVP limit: 33V $\pm$ 3V

Efficiency

82% 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

By built-in high quality fan

Environmental Protection

Full ruggedizing

Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

115,000 hours @ 45°C
(Fans not included)

Indicators

Green diagnostic LED on each module
visible through the rear grid.

Control Input

None

Alarm Output

Not installed

Package/ Dimensions (WxHxL)

U5512L: 127 x 127 x 317mm

(5" x 5" x 12.5")

L-brackets for mounting with

M5x10mm screws

Mounting holes are clear

Weight

4.9kg (10.8 lbs)

Connections

Input: 3-pole terminal block with
13mm spacing

Output: M6 threaded studs, stud boots

RoHS Compliance

Compliant

Warranty

Two years subject to application
within good engineering practice
Contamination related failures and
shipping cost excluded.

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