

Source Control Document.

Model: PFC 319F-M/28FT-RCX-R5418

COSD: 3B10-3

Summary Description: 700W, Industrial Quality Single Output AC/DC Power Supply
115Vac/400Hz to 28Vdc/ 25A

Customer Name: TUBITAK /Turkey/Kalinka/Bulgaria

Customer Part Number: Same as above

Product Description:

This power converter is a rugged industrial quality unit with PFC input which uses field proven topology. It is a mature design with an excellent track record in hundreds of applications. It is cooled by two fans. The use of components with established reliability results in a high demonstrated MTBF.

Special Features: 400Hz input, Ruggedizing, Conformal coating, Low temperature options, Test data, C of C, CE mark, CE DoC.



SPECIFICATIONS

Input Voltage

95-264Vac, 47-400Hz
Input Current: 10.5A rms max.
Power factor is min 0.9 at full load for the entire input range with 400Hz
Meets EN61000-3-2

Input Protection

Inrush current limiting
Varistors
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 EN60950-1 and corresponding CSA/UL standards

EMI

EN55022 Class A with margins

Hold Up Time

Minimum 10msec at full load for 5% drop of output voltage at any input

Switching Frequency

80kHz input stage
55KHz +/-3KHz output stage

Output Voltage / Current

28Vdc/25A continuous (700W max)
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 Noise

Better than 60mVrms or 300mVpp (20MHz BW)

Output Overload Protection

Current limiting with short circuit protection (No hiccup)
Self-resetting thermostat for thermal protection
Current Limit: 29A ± 2A

Output Overvoltage Protection

Double regulator loop
OVP setting: 32V ± 1V

Efficiency

80% at full load

Operating Temperature Range

-40°C to +50°C for full specification with proper installation

Temperature Drift

0.03% per °C over operating temperature range

Cooling

By built-in fans

Environmental Protection

Basic ruggedizing
Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5-95% non-condensing

MTBF

130,000 hours @45°C (Fans excluded)

Indicators

None

Control Input

None

Alarm Output

Not installed

Package / Dimensions (WxHxL)

FF4: 151 x 62 x 357mm
(6" x 2.4" x 14")

Including terminal block and flanges
Mounting holes are clear

Weight

2.2 kg (4.9 lbs)

Connections

12-pole barrier-type terminal block with 3/8" spacing
Output: For full power, wire-up both positive and both negative terminals

RoHS Compliance

Compliant

Warranty

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

Terminal Block Pin-Out

OUTPUT					INPUT						
NOT USED	+	+	-	-	NOT USED	NOT USED	NOT USED	NOT USED	GND	N	PH
1	2	3	4	5	6	7	8	9	10	11	12

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