750W, Rugged, Industrial Quality AC/DC Power Supply with PFC-Input
PFC 319F-FT Series

- Electronic power factor correction (PFC)
- Rugged, industrial quality
- Field-proven design
- Full electronic protection
- N+1 redundancy as an option

The PFC 319F Series rugged, industrial quality AC/DC power supply with power factor corrected input uses a field proven design to generate up to 750W output power. It has an excellent track record in numerous heavy-duty applications. Cooling is by built-in fans, with additional conduction via the baseplate. It has full electronic protection. Low component count, large design headroom, and the use of components with established reliability result in a high MTBF. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage
Universal 90 … 264VAC
47 - 63Hz

Power Factor is min.0.97 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 min. 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 related standards

EMI
EN55022 Class A as minimum

Switching Frequency
50-150KHz Boost section (dependent on the load)
55 KHz +/-3KHz for the DC/DC (half-bridge) section

Hold Up Time
Min. 10ms at any input for 5% drop in the output voltage

Output Voltage/Current
24V/31A, 48V/16A or 125V/6A are standard.
Consult factory for other voltages

Redundancy Diode
Optional

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
Less than 1% peak-to-peak or 0.2% RMS of the output voltage (20MHz BW)

Output Overload Protection
Rectangular current limiting with short-circuit protection (no hiccup)
Thermal shutdown in case of insufficient cooling (self resetting)

Output Over-voltage Protection
Second regulator loop.
Typically set at 120% of nominal output voltage

Efficiency
Output voltage dependent.
Typically 80% at full load

Operating Temperature Range
0°C to 50°C cold plate temperature for full specification without derating
Extended temperature range available

Temperature Drift
0.03% per °C over operating temperature range

Cooling
By built-in fans

Environmental Protection
Basic ruggedizing
Full ruggedizing and conformal coating on request

Shock/Vibration
IEC 61373 Cat 1 A&B

Humidity
5 - 95% non-condensing

MTBF
130,000 hours @ 45°C
(fans excluded)
Demonstrated MTBF is significantly higher

Indicators
None

Alarm Output
Optional

Dimensions
FF4: 155 x 64 x 353 mm
(6.1" x 2.5"x 13.9") including terminal block, flanges and fans
Mounting holes are clear

Weight
2.5 kg (5.5 lb)

Connections
12-pole barrier type terminal block with 3/8" spacing

RoHS Compliance
Fully compliant

Warranty
Two years subject to application within good engineering practice

Enhancements to these general specifications and customizing can be accommodated upon request. Specifications subject to change.

Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility.

ABSOPULSE ELECTRONICS LTD.

ABOPULSE ELECTRONICS LTD
110 Walgreen Road
Ottawa, Ontario. K0A 1L0. CANADA
Tel: +1-613-836-3511 Fax: +1-613-836-7488
E-mail: absopulse@absopulse.com
http://www.absopulse.com