300W, Single-Output Power Supply with PFC-Input
PFC 65-FT Series

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

The PFC 65 series AC/DC power supply with factor corrected input delivers up to 300W output power. Designed for use in demanding environments, the unit's robust construction ensures resistance to high levels of shock and vibration. All major heat generating components are installed on aluminum heatsink blocks, which are thermally connected to the base-plate. This chassis-mount design is optimized for low component count and high efficiency. The use of components with established reliability results in a high demonstrated MTBF. The PFC 65 is manufactured at our plant under strict quality control. Fan cooled versions are also available for higher power rating.

SPECIFICATIONS

Input Voltage
Universal 90 … 264VAC
47 - 63Hz

Input Protection
Inrush current limiting
Varistor
Internal safety fuse
Lower voltage than the specified min. input will not damage the unit

Power Factor
Min. 0.97 at full load for the entire input range. Meets EN61000-3-2

Isolation
2250VDC input to chassis
4300VDC input to output
8mm spacing
500VDC output to chassis

Standards
Designed to meet EN 60950 and corresponding UL and CSA 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
12VDC/25A, 24VDC/13A, 48VDC/6.5A or 125V/2.4A
Consult factory for other voltages

Redundancy Diode
On request

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 to+50°C for full specification,
Extended temp. range available

Temperature Drift
0.03% per °C over operating tempera range

Cooling
Conduction to customer heatsink or chassis and natural convection

Environmental Protection
Basic ruggedizing
Full ruggedizing and conformal coating on request

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

Indicators
None

Alarm Output
Optional

Dimensions
F3: 132 x 62 x 290 mm
(5.2" x 2.5" x 11.4") including terminal block and flanges
Mounting holes are clear

Weight
1.77 Kg (3.9 lb)

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

RoHS Compliance
Fully compliant

Warranty
Twelve months 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: (613) 836-3511 Fax: (613) 836-7488
E-mail: absopulse@absopulse.com
www.absopulse.com