

750W, Rugged, Industrial Quality AC/DC Power Supply with PFC-Input PFC 65F-125FT



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

This rugged, industrial quality AC/DC power supply with power factor corrected input uses field proven topology to generate up to 750W output power. It is a mature design with an excellent track record in numerous heavy-duty applications. Cooling is by long life built-in fans, with additional conduction via the base plate to a heat-sinking surface. An optional built-in redundancy diode allows parallel connection to achieve higher output power or N+1 redundancy, and also makes the unit suitable for battery charging applications. Full electronic protection, low component count, large design headrooms, 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 95 ... 264Vac, 47 - 63Hz
Input Current: 10Arms max. at 95Vac
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 minimum input will not damage the unit

Isolation

2250VDC input to chassis
4300VDC input to output;
8mm spacing
1000VDC output to chassis

Standards

Designed to meet EN 60950 and related standards

EMI

EN55022 Class A with margins

Switching Frequency

50-150KHz for input section (dependent on the load)
55 KHz +/-3KHz for the DC/DC output section

Hold Up Time

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

Output Voltage/Current

125V/6A standard.
Adjustable 110-130V
Output is floating, either terminal can be grounded
Other voltages on request

Redundancy Diode

Not installed
Available 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, completely stable and independent of main regulator loop.

Efficiency

Output voltage dependent
Typically 80% at full load

Operating Temperature Range

0°C to 50°C for full specification
Extended temperature range with derating available

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Forced air by two high quality built-in fans and conduction to customer heat-sink or chassis

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

110,000 hours @ 45 °C (fans excluded)
Demonstrated MTBF is significantly higher

Indicators

None

Control Input

None on standard version

Alarm Output

None on standard version
Form C contacts as option

Package/Dimensions (W x H x L)

FF3: 155 x 64 x 300 mm
6.1" x 2.5" x 11.8" including terminal block and flanges
Open board format also available

Weight

2.3kg (5 lbs.)

Connections

12 pole barrier type terminal block, 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 are 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.



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