

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



European Stocking Distributor
Phone: +41 44 730 33 53

Email: sales@hvps-condatas.com / www.hvps-condatas.com
Rietbachstrasse 7, 8952 Schlieren (ZH), Switzerland