

1000W, Rugged, Industrial Quality, AC/DC Power Supply with PFC-input PFH 65F Series

- Fixed frequency power factor correction (PFC)
- Rugged industrial quality
- Cooling by internal fans
- Single phase input
- Full electronic protection
- N+1 redundancy available as option



This rugged, industrial quality AC/DC power supply with PFC input uses field proven PFQ 65 topology to deliver up to 1000W output power. An optional built-in redundancy diode allows for parallel connection to achieve higher output power or N+1 redundancy, and also makes the unit suitable for battery charging applications. Cooling is by high-quality built-in fans and via base plate to a heat-sinking surface. 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

95-264Vac, 47... 63Hz
Power Factor is better than 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
1300VDC output to chassis

Standards

Designed to meet EN 60950 and related standards

EMI

EN 55022 Class A with margins

Hold Up Time

Min. 5ms at nominal input for 5% drop of the output voltage at any input

Switching Frequency

Input Stage 100kHz \pm 5kHz
Output Stage: 55kHz \pm 3kHz

Output Voltage/Current

48Vdc/20A, 110Vdc/9A or 125Vdc/8A are standard
Output is floating; either terminal can be grounded
Other outputs also on request

Redundancy Diode

Not installed
Available as option

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

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

Overload Protection

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

Output Overvoltage Protection

Second regulator loop completely stable and independent of the main regulator loop

Efficiency

Output voltage dependent
Typically 80% at full load

Operating Temperature

0°C to 50°C cold plate temperature for full specification
Extended temperature range available

Temperature Drift

0.03% per °C over
Operating temperature range

Cooling

Forced air by two built-in fans and conduction to customer heatsink or chassis

Environmental Protection

Basic ruggedizing
Heavy ruggedizing and conformal coating as option

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

Control Input

None

Alarm Output

None
Form C output Fail Alarm as option

Package/ Dimensions (WxHxL)

FF3: 153 x 64 x 300 mm (6.1" x 2.5" x 11.8") including terminal block, flanges and fans
Mounting holes are clear

Weight

2.3 kg (5.0 lb)

Connections

12 pole barrier type terminal block, 3/8" spacing

RoHS Compliance

Fully compliant

Warranty:

Two years subject to application within good engineering practice
Contamination related items and shipping costs not included.

Terminal Block Pin-out

DC OUTPUT					ALARM (OPTION)			AC INPUT			
NOT USED	NOT USED	+	+	-	-	FAIL OPEN	COM	FAIL CLOSED	GND	N	PH
1	2	3	4	5	6	7	8	9	10	11	12

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 BAPT-approved Facility



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