

200W, Rugged, Industrial Quality AC/DC Power Supply with PFC-Input PFC 53-FT Series



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

The PFC 53 series rugged, industrial quality AC/DC power supply with power factor corrected input uses field proven technology to generate the required output power. It has an excellent track record in numerous applications. Cooling is via baseplate to a heatsinking surface and by natural convection. 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. This series is also available in Eurocard plug-in format for rack-mount applications.

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 minimum 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 EN60950 and corresponding UL and CSA standards.
UL and CSA approved.

EMI

EN55022 Class A minimum

Switching Frequency

50-150KHz input section
(load dependent)
55 KHz output section

Hold Up Time

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

Output Voltage/Current

12V/16A, 24V/8A, 48V/4A,
110/1.8A or 125V/1.6A
Consult factory for other voltages

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

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.

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

Conduction via base plate to customer heatsink or chassis and/or natural convection

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

150,000 hours @ 45°C
Demonstrated MTBF is significantly higher

Indicators

Output ON LED visible through the cooling slots

Alarm Output

None on standard version
Available as an option

Package / Dimensions

F2: 114 x 58 x 256 mm
(4.5" x 2.3" x 10.1") including mounting flanges and terminals

Weight

1.2kg (2.6 lb)

Connections

Barrier type terminal block with 3/8" spacing, 9 poles

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.



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