

## 200W, Rugged Industrial Quality AC/DC Power Supply HBC 200-FT Series



- Rugged industrial quality
- Field-proven design
- Conduction/convection cooling (no fans)
- Full electronic protection
- Large design headroom
- Most versions are available from stock

This rugged, industrial quality AC/DC power supply uses field-proven topology to generate the required output power. It is a simplified version of the field proven OLC 53 series, with the same electrical performance but with fewer available options. Cooling is via baseplate to a heat-sinking surface and by natural convection. Full electronic protection, low component count, large design headroom, and the use of components with established reliability contribute to high MTBF. It is manufactured at our plant under strict quality control. For customized versions with additional options, and for Eurocard plug-in modules, please see the OLC 53 Series.

### SPECIFICATIONS

#### Input Voltage

115/230Vac +/- 15%, 47 - 63Hz  
Voltage selection by internal jumper  
Input also accepts 220V – 370Vdc range

#### 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 EN 60950 and corresponding standards

#### EMI

EN55022 Class A with margins

#### Switching Frequency

55 KHz +/-3KHz

#### Hold Up Time

Minimum 5ms at full load for 5% drop of output voltage at nominal input

#### Output Voltage/Current

12V/16A; 24V/8A, 48V/4A or 125V/1.6A  
Total output power 200W continuous  
Output is floating; either terminal can be grounded  
Other voltages on request

#### Redundancy Diode

Installed 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% of output voltage 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 Overvoltage Protection

Double regulator loop completely stable and independent of main loop

#### Efficiency

80% - 87% at full load, depending on output voltage

#### Operating Temperature Range

0°C to 50°C for full specification without derating  
(For extended temperature range see OLC 53 Series)

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

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

#### Environmental Protection

Basic ruggedizing  
Heavy ruggedizing and conformal coating available as an option

#### 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

Green "Output ON" LED visible through the cooling slots

#### Control Input

None

#### Alarm Output

Output fail alarm Form C contacts installed on request

#### Package/Dimensions (W x H x L)

F2: 114 x 58 x 256 mm (4.5" x 2.3" x 10.1") including terminal block and flanges  
Mounting holes are clear

#### Weight

1.2 kg (2.6 lb)

#### Connections

9-pole barrier type terminal block with 3/8" spacing

#### RoHS Compliance

Fully compliant

#### Warranty

Two years subject to application within good engineering practice

Enhancements to these general specifications 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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