

300W, Rugged, Cost-optimized, Industrial Power Supply HBC 300-FT Series

- Rugged Industrial quality
- Conduction/convection cooling
- Single output
- Full electronic protection
- Large design headrooms
- Optimized cost by automated assembly
- Most versions are available from stock



The HBC 300 series is a high reliability rugged industrial quality AC/DC power supply which uses field-proven topology to generate 300W output power. It is a mature design with a track record in hundreds of applications. The design has large design headrooms and is rated for 50°C operation without derating. It is cooled via baseplate to a heatsinking surface and by natural convection. Low component count and the use of components with established reliability results in a high MTBF. The input is selectable for 230Vac or 115Vac operation by internal jumper. The unit has two output terminals "Redundant" via a built-in redundancy diode, and "Non-Redundant" which is direct. The unit is manufactured at our plant under strict quality control. For customized versions with various options, and for Eurocard plug-in modules, the HBC 65 and LOT 65 series will remain available.

SPECIFICATIONS

<p>Input Voltage 115/230Vac +/- 15%, 47 - 63Hz Voltage selection by internal jumper Input also accepts 220V – 370Vdc range</p> <p>Input Protection Inrush current limiting Varistor Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p> <p>Isolation 2250VDC input to chassis 4300VDC input to output; 8mm spacing 500VDC output to chassis</p> <p>Standards Designed to meet EN 60950 and corresponding UL and CSA standards</p> <p>EMI EN55022 Class B</p> <p>Switching Frequency 55 KHz +/-3KHz</p> <p>Hold Up Time Minimum 5ms at full load for 5% drop of output voltage at nominal input</p>	<p>Output Voltage/Current 12V/25A; 24V/12A, 48V/6A or 125V/2A on the "Redundant" output Voltage on the "Direct" terminal is one diode drop higher. Output is floating, either terminal can be grounded. Consult factory for other voltages</p> <p>Redundancy Diode Installed internally on the "Redundant" terminal</p> <p>Line/Load Regulation +/- 1% combined from zero load to full load on the "Direct" output</p> <p>Dynamic Response Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time</p> <p>Output Ripple / Noise Less than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)</p> <p>Output Overload Protection Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)</p>	<p>Output Overvoltage Protection Double regulator loop completely stable and independent of main loop</p> <p>Efficiency 80% - 87% at full load, depending on output voltage</p> <p>Operating Temperature Range 0 to +50°C for full specification with proper cooling (For extended temperature range see HBC 65 Series)</p> <p>Temperature Drift 0.03% per °C over operating temperature range</p> <p>Cooling Conduction via base plate to customer heatsink or chassis and natural convection</p> <p>Environmental Protection Basic ruggedizing</p> <p>MTBF 150,000 hours @ 45 °C Demonstrated MTBF is significantly higher.</p>	<p>Indicators Green "Output ON" LED visible through the cooling slots</p> <p>Control Input None</p> <p>Alarm Output Form C contacts</p> <p>Package/Dimensions (W x H x L) F3: 132 x 62 x 300 mm (5.2" x 2.43" x 11.8") including terminal block and flanges Mounting holes are clear</p> <p>Weight 2 Kg (4.4 lb)</p> <p>Connections 12-pole barrier type terminal block with 3/8" spacing</p> <p>RoHS Compliance Fully compliant</p> <p>Warranty Two years subject to application within good engineering practice</p>
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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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