

## 500 - 750W, Rugged, Industrial Quality DC/DC Converter with Fan Cooling BAP 65F-Series



- Rugged industrial quality
- Field-proven design in a wide range of applications
- Low noise output
- Full electronic protection
- N+1 redundancy available

The BAP 65F Series rugged, industrial quality DC/DC converter uses a field proven technology to generate up to 750W, depending on input/output combination. It is a mature design with a track record in numerous applications. Cooling is by built-in fans, with additional conduction via baseplate. Full electronic protection, low component count, large design headroom, and the use of components with established reliability result in a high MTBF. An optional built-in redundancy diode allows for parallel and N+1 operation. Other options include a Form C output fail alarm and remote shutdown. Additional ruggedizing and conformal coating are available for applications requiring higher immunity to shock, vibration and humidity. The series is manufactured at our plant under strict quality control.

### SPECIFICATIONS

<p><b>Input Voltage</b> 24Vdc (21-29V) 48Vdc (42-56V) 125Vd (105-145V) Consult factory for other voltages</p> <p><b>Input Protection</b> Inrush current limiting Varistor Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p> <p><b>Input Isolation</b> According to input voltage minimum of: 1000VDC input to chassis 1500VDC input to output 500VDC output to chassis</p> <p><b>Standards</b> Designed to meet EN60950 and related standards</p> <p><b>EMI</b> EN 55022 Class A as a minimum</p> <p><b>Switching Frequency</b> 55kHz +/- 3kHz</p>	<p><b>Output Voltage</b> 24V, 48V or 125Vdc (500 – 750W depending on input/output combination) Consult factory for other voltages</p> <p><b>Redundancy diode</b> None Available as option</p> <p><b>Line/Load Regulation</b> +/-1% combined</p> <p><b>Dynamic Response</b> Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time</p> <p><b>Output Ripple/Noise</b> Better than 1% of output voltage peak to peak or 0.2% rms of the output voltage (20MHZ BW)</p> <p><b>Overload Protection</b> Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)</p> <p><b>Output Overvoltage Protection</b> Double regulator loop</p>	<p><b>Efficiency</b> Typically 85% at full load depending on input/output combination</p> <p><b>Operating Temperature</b> 0° C to 55° C full specification with proper airflow. Extended temperature ranges available as an option.</p> <p><b>Temperature Drift</b> 0.03% per °C over operating temperature range</p> <p><b>Cooling</b> Forced air by two high quality built-in fans and conduction to customer heatsink or chassis</p> <p><b>Environmental Protection</b> Basic ruggedizing Optional heavy ruggedizing and conformal coating is available</p> <p><b>Shock/Vibration</b> IEC 61373 Cat 1 A&amp;B</p> <p><b>Humidity</b> 5 - 95% non-condensing</p> <p><b>MTBF</b> 130,000 hours @ 45 °C (fans excluded) Demonstrated MTBF is significantly higher.</p>	<p><b>Indicators</b> None</p> <p><b>Control Input</b> Optional</p> <p><b>Alarm Outputs</b> Optional</p> <p><b>Package/Dimensions (WxHxL)</b> FF3: 155 x 64 x 300 mm (6.1" x 2.5" x 11.8") including terminal block and flanges</p> <p><b>Weight</b> 2.3kg (5 lbs.)</p> <p><b>Connections</b> 12 pole barrier type terminal block with 3/8" spacing</p> <p><b>RoHS Compliance</b> Fully compliant</p> <p><b>Warranty</b> Two years subject to application within good engineering practice</p>
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**Enhancements to these general specifications 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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