

## 200W, Rugged, Cost-optimized Industrial DC/DC Converter BAP 200-FT Series

- Rugged industrial quality
- Single regulated and adjustable output
- Full electronic protection
- Field-proven design in a wide range of applications
- N+1 redundancy available as option
- Plug-in (Eurocard) version available



This rugged, industrial quality DC/DC converter uses field-proven topology to generate 200W output power. It is a simpler version of the field proven BAP 236 series with cycling type overload protection. 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. It is manufactured at our plant under strict quality control. For customized versions with various options, and for Eurocard plug-in modules, please see the BAP 236 System datasheet.

### SPECIFICATIONS

#### Input Voltage

Any single DC input from 12V to 125Vdc  
For higher input see HBC 200 series  
Consult factory for other voltages

#### Input Protection

Inrush current limiting  
Varistor  
Reverse polarity protection  
Internal safety fuse  
Lower voltage than the specified minimum input will not damage the unit

#### Isolation

According to input voltage minimum of:  
1000VDC input to chassis,  
1500VDC input to output,  
500VDC output to chassis

#### Standards

Designed to meet EN60950 and corresponding UL/CSA standards

#### EMI

EN 55022 Class B

#### Switching Frequency

55KHz +/- 3KHz

#### Output Voltages

Any single DC output from 12V to 125Vdc (200W)  
Consult factory for other voltages

#### Redundancy diode

Available as option

#### Line/Load Regulation

+/- 1% combined from zero load to full load on the "Direct" output

#### 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% Vrms (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 to +50°C for full specification with proper cooling  
(For extended temperature range see BAP 236 Series)

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

Convection and conduction cooling via base plate

#### Environmental Protection

Basic ruggedizing  
Heavy ruggedizing and conformal coating as option

#### MTBF

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

#### Indicators

Green "Output ON" LED visible through the cooling slots

#### Control Input

None

#### Alarm Output

Form C contacts

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

F2: 112.4 x 57.2 x 256 mm (4.43" x 2.25" x 10.08") including terminal block and flanges  
Mounting holes are clear

#### Weight

1.13 kg (2.5 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 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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