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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