150W, Rugged DC/DC Industrial Converter
BAP 150-FT Series

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

This rugged, industrial quality DC/DC converter uses field-proven topology to generate 150W output power. It is a simpler version of the field proven BAP 180 series with cycling type overload protection. Cooling is via baseplate to a heatsinking surface and by natural convection. 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. Additional ruggedizing and conformal coating are available for applications requiring higher immunity to shock, vibration and humidity. It is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage
Any single DC input from 12V to 125Vdc
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 related standards.

EMI
EN 55022 Class A as a minimum

Switching Frequency
80KHz +/- 5KHz

Output Voltages
Any single DC output from 12V to 125Vdc (150W)
Consult factory for other voltages

Redundancy diode
Available as option

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
Better than 1% of output voltage peak to peak or 0.2% Vrms (20MHz BW)

Output Overload Protection
Rectangular current limiting with hiccup mode short-circuit protection.
Thermal shutdown in case of insufficient cooling (self resetting)

Output Overvoltage Protection
Double regulator loop completely stable and independent of main loop

Efficiency
Typically 85% at full load depending on input/output combination

Operating Temperature Range
0 to + 60°C cold plate temperature for full specification
Extended temperature ranges available

Temperature Drift
0.03% per °C over operating temperature range

Cooling
Conduction via base plate and convection

Environmental Protection
Basic ruggedizing
Conformal coating as option

MTBF
160,000 hours at 45°C
Demonstrated MTBF is significantly higher

Indicators
Green 'Output ON LED' visible through cooling slots

Control Input
None

Alarm Output
None on standard version
Form C available as option

Package/Dimensions (W x D x H)
F1: 112 x 51x 201 mm
(4.4" x 2" x 7.9") including terminal block and flanges.
Mounting holes are clear

Weight
0.74 kg (1.64 lb)

Connections
9-pole barrier type terminal block, 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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