

## 1500W, Rugged Industrial Quality DC/DC Converter BAP 765F-FT



- Rugged industrial quality
- Single regulated and adjustable output
- Full electronic protection
- Fan cooling
- N+1 redundancy available

The BAP 765F Series rugged, industrial quality DC/DC converter uses established design techniques to deliver up to 1500W output power, depending on the input/output configuration. This series offers a range of input and output voltages. 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. Additional ruggedizing and conformal coating are available for applications requiring higher immunity to shock, vibration and humidity. This series is manufactured at our plant under strict quality control.

### SPECIFICATIONS

#### Input Voltage

125Vdc (105 - 145Vdc) as standard.  
Lower inputs with reduced power on request

#### Input Protection

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

#### Input Isolation/Safety

2250Vdc input to chassis  
2250Vdc input to output  
500Vdc output to chassis

#### Standards

Designed to meet EN60950 and corresponding UL and CSA standards

#### EMI

EN55022 Class A with margins

#### Switching Frequency

55KHz +/- 3KHz

#### Output Voltages

24V/60A; 36V/40A; 48V/30A; 72V/20A; 96V/15A or 120V/12A are standard  
Consult factory for other voltages and output currents

#### Redundancy Diode

Available as an option

#### Line/Load Regulation

± 1% combined

#### Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 2msec recovery time

#### Output Ripple/Noise

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

#### Overload Protection

Rectangular current limiting with short circuit protection  
Thermal shutdown with automatic reset in case of insufficient airflow

#### Output Overvoltage Protection

Double regulator loop

#### Efficiency

Input voltage dependent  
Typically 85% at full load

#### Operating Temperature

0°C to 50°C for full specification without derating  
Extended temperature ranges available

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

Forced air by high quality built-in fans and conduction to customer heat sink or chassis.  
Fans draw air into the unit.

#### Environmental Protection

Basic ruggedizing  
Heavy ruggedizing and conformal coating available as an option

#### Shock/Vibration

IEC 61373 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### MTBF

130,000 hours @ 45°C  
Demonstrated MTBF is significantly higher.

#### Indicators

None

#### Alarm Output

None  
Available as an option

#### Package/Dimensions (W x H x L) FF3:

155 x 64 x 300 mm  
(6.1" x 2.5" x 11.8") including terminal block, flanges and fans

#### Weight

2.3 Kg (5 lbs)

#### Connections

¼" brass studs or barrier type terminal block depending on the configuration

#### RoHS Compliance

Fully compliant

#### Warranty

Two years subject to application within good engineering practice

Input	Output	Power Estimate
24V	12V	750W
24V	24V	750W
24V	48V	750W
24V	125V	750W
21...29V range		
48V	12V	750W
48V	24V	1000W
48V	48V	1000W
48V	125V	1000W
42...56V range		

Input	Output	Power Estimate
72V	12V	750W
72V	24V	1400W
72V	48V	1400W
72V	125V	1400W
60...80V range		
125V	12V	750W
125V	24V	1500W
125V	48V	1500W
125V	125V	1500W
105...140V range		

I in max : 30A  
I out max: 60A  
P out max: 1500W  
Primary limitation: track, EMI filter  
Secondary limitation: track, output rectifier diode, output inductor

**Enhancements or customizing of 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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