

# 1500W, Rugged DC/DC Industrial 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 is a rugged, industrial quality DC/DC converter which uses established design techniques to deliver 1500W output power, depending on the input/output configuration. This converter offers a range of input and output voltages. The BAP 765F features full electronic protection, high efficiency and low output noise. The built-in fan provides sufficient airflow for operation without de-rating up to 50°C ambient temperature. Options include extended operating temperature, N+1 redundancy and alarm output. The use of components with established reliability results in a high demonstrated MTBF. The BAP 765F 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

**Temperature Drift**

0.03% per °C over operating temperature range

**Cooling**

Conduction to customer heatsink or chassis and forced air by two built-in fans

**MTBF**

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

**Environmental Protection**

Basic ruggedizing

**Indicators**

None

**Alarm Output**

None  
Available as an option

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

FF3:153 x 61 x 295 mm  
(6.02" x 2.4" x 11.62) 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 BAPT-approved Facility*



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