

## 500 - 750W, Rugged, Industrial DC/DC Converter with Fan Cooling BAP 65F-FT Series



- Rugged industrial quality
- Field-proven design in a wide range of applications
- Single low noise output
- Full electronic protection
- N+1 redundancy available

The BAP 65F Series rugged, industrial quality DC/DC converter uses a field proven technology to generate up to 750W, depending on input/output combination. It is a mature design with a track record in numerous applications. Cooling is by built-in fans, with additional conduction via baseplate. The unit has 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. Other options include a Form C output fail alarm and remote shutdown. Additional ruggedizing and conformal coating are available for applications requiring higher immunity to shock, vibration and humidity. The BAP 65F is manufactured at our plant under strict quality control.

### SPECIFICATIONS

#### Input Voltage

Any DC input from  
24V to 125Vdc  
Other voltages as option

#### Input Protection

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

#### Input 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 UL & CSA standards

#### EMI

EN 55022 Class A as a minimum

#### Switching Frequency

55kHz +/- 3kHz

#### Output Voltage

Any single DC output from  
12V to 125Vdc.  
(500 – 750W depending on  
input/output combination)  
Consult factory for other voltages

#### Redundancy diode

Available as option

#### Line/Load Regulation

±1% combined

#### 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% rms of the  
output voltage (20MHZ BW)

#### 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

#### Efficiency

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

#### Operating Temperature

0 to +50°C with convection.  
Extended temperature range  
available

#### Temperature Drift

0.03% per °C over operating  
temperature range

#### Cooling

Forced air by two built-in fans  
and conduction to customer  
heatsink or chassis

#### Environmental Protection

Basic ruggedizing  
Optional heavy ruggedizing and  
conformal coating is available

#### Shock/Vibration

IEC 61373 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### MTBF

130,000 hours @ 45 °C  
(fans not included)  
Demonstrated MTBF is  
significantly higher.

#### Indicators

None

#### Control Input

Optional

#### Alarm Outputs

Optional

#### Package/Dimensions (WxHxL)

FF3: 153 x 61 x 295 mm  
(6.02" x 2.4" x 11.6) including  
terminal block and flanges

#### Weight

2.3kg (5 lbs.)

#### Connections

12 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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