

**Model:** BAP 200-125/48FTND (Standard ND Stock Version)  
**OSD:** 1484 8614 SPND  
**Summary description:** 200W, Single Output DC/DC Converter,  
 125V to 48V/4A  
**Customer Name:** ABS ND Stock



**Product description:**

This rugged, industrial quality DC/DC converter uses field-proven topology to generate the required output power. It is a mature design with a track record in hundreds of applications. The series has large design headrooms and is rated for full operation over the specified temperature range. Cooling is via baseplate to a heatsink surface and by natural convection. Low component count and the use of components with established reliability results in a high MTBF. The unit has two output terminals: a *Redundant* via built-in redundancy diode, and a *Direct*, which bypasses the redundancy diode. The unit is manufactured at our plant under strict quality control.

**Special Feature:** These stock units are individually packed and ready for immediate shipping

**SPECIFICATIONS**

**Input Voltage**

125Vdc nominal  
 Operating range 88-140Vdc  
 Input Current: 2.8A max

**Input Protection**

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

**Isolation**

1500Vdc input to chassis  
 2250Vdc input to output  
 500Vdc output to chassis

**Standards / Approvals**

Designed to meet EN60950 requirements and corresponding UL/CSA standards

**EMI**

EN55022 Class B

**Switching Frequency**

55kHz +/- 3kHz

**Output Voltage/Current**

Direct: 48.8Vdc +/- 0.2V/4A  
 Redundant: 48V/4A, tracking  
*Direct* output with one diode drop  
 Total output power 200W continuous  
 Adjustment range: 47.8-56V *Direct* output  
 Output is floating, either terminal can be grounded

**Redundancy Diode**

Installed on *Redundant* output

**Line/Load Regulation**

+/- 1% combined from no 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 80mVrms or 400mVpp (@ 20MHz BW)

**Output Overload Protection**

Rectangular current limiting with short circuit protection.  
 Thermal shutdown with automatic reset in case of insufficient cooling  
 Current Limit set to: 4.5A +/- 0.4A

**Output Overvoltage Protection**

Double regulator loop. Second loop completely stable and independent of main regulator loop  
 OVP setting: 58V +/- 1.5V (*Direct* output)

**Efficiency**

85% at full load

**Operating Temperature Range**

0°C to +50°C for full specification with proper cooling

**Temperature Drift**

0.03% per °C over operating temperature range

**Cooling**

By conduction via base plate and natural air convection

**Environmental Protection**

Basic ruggedizing

**Shock/Vibration**

IEC 61373 Cat 1 A&B as minimum

**Humidity**

5-95% non-condensing

**MTBF**

Min. 150,000 hours @ 45°C

**Indicators**

Green "Power On" LED visible through the cooling slots

**Alarm Output**

Output Fail Form C contacts

**Package / Dimensions (WxHxL)**

F2: 114 x 57 x 254mm  
 (4.5"x 2.25"x 10.0")  
 Mounting holes are clear

**Weight**

1.3kg (2.9 lbs)

**Connections**


9-pole barrier-type terminal block, 3/8" spacing

**RoHS Compliance**

Fully compliant

**Warranty**

Two years subject to application within good engineering practice

Drawn by TS/bh	Date May 7, 2009
Checked by TS	Drawing No./ Rev. SCD 1484 8614 SPNDA3
Approved by TS	

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