

Model: BAP 200-24/12FT (Standard FG Stock)

OSD: 1484 4357 **COSD:** W414

Summary description: 200W, Single Output DC/DC Converter,
24V to 12V/16A

Customer Name: ABS FG Stock

Customer Part Number: Same as above



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 standard, stock version 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: Label on paper, to be replaced upon delivery

SPECIFICATIONS

Input Voltage

24Vdc nominal
Operating range 21-30Vdc
Input Current: 11A max

Input Protection

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

Isolation

1000Vdc input to chassis
1500Vdc input to output
500Vdc output to chassis

Standards

Designed to meet EN60950
and corresponding UL/CSA standards

EMI

EN55022 Class B

Switching Frequency

55kHz +/- 3kHz

Output Voltage/Current

Direct: 12.5Vdc/16A
Redundant: 12V/16A tracking
Direct output with one diode drop
Total output power 200W continuous
Adjustment range: 12-14V *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 30mVrms or 150mVpp (@ 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: 18A +/- 1.5A

Output Overvoltage Protection

Double regulator loop. Second loop completely stable and independent of main regulator loop
OVP setting: 16V +/- 1V (*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

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

1.2kg (2.6 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

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Approved by TS	