

300W, Four-output, Rugged, AC/DC Industrial Power Supply HBC 465-FT Series

- Rugged, industrial quality
- Four regulated and adjustable outputs
- Convection/conduction cooling
- Full electronic protection
- Field-proven design



The HBC 465 Series rugged, four output AC/DC industrial power supply uses field-proven technology to deliver 300W output power. The unit has an excellent track record in numerous applications. Cooling is by conduction via baseplate to a heatsinking surface and by natural convection. The unit has full electronic protection. Low component count, large design headrooms, and the use of components with established reliability result in a high MTBF. Additional ruggedizing and conformal coating are available for operation in extreme environments. The unit is manufactured at our plant under strict quality control. Customized versions and fan-cooled versions with increased output power are also available.

SPECIFICATIONS

Input Voltage

115/230VAC +/- 15%
47 - 63Hz

Input Protection

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

Isolation

2250VDC input to chassis
4300VDC input to output;
8mm spacing
500VDC output to chassis

Standards

Designed to meet EN 60950 and corresponding UL and CSA standards

EMI

EN55022 Class A, as minimum

Switching Frequency

55 kHz +/-3KHz

Hold Up Time

Minimum 5ms at full load for 5% drop of output voltage at nominal input

Output Voltage/Current

Up to 60V and up to 20A on the main output.
Up to 24VDC on the other outputs.
Up to 3A for second & third.
Up to 1A for fourth output.
Consult factory for other voltages

Redundancy Diode

None

Line/Load Regulation

+/- 1% combined from zero load to full load

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

Output Ripple / Noise

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

Output 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 completely stable and independent of main loop

Efficiency

Output voltage dependent.
Typically 80% at full load

Operating Temperature Range

0 to 50 °C for full specification without de-rating.
Extended temp. range available

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Conduction to customer heatsink or chassis and natural convection

Environmental Protection

Basic ruggedizing
Full ruggedizing and conformal coating available as option

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 – 95% non-condensing

MTBF

130,000 at 45°C
Demonstrated MTBF is significantly higher

Indicators

None

Control Input

None

Alarm Output

None

Package/Dimensions (WxHxD)

F3: 132 x 62 x 300 mm
(5.2" x 2.43" x 11.8")
including mounting flanges and terminals

Weight

2 kg (4.4 lb)

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



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