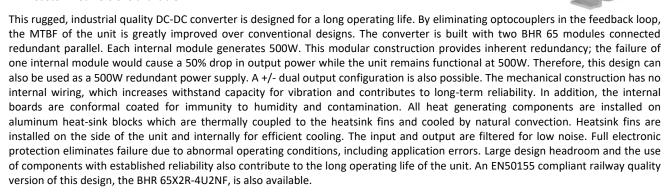
1000W, High Reliability, Convection Cooled, Industrial Quality DC-DC Converter BHR 65X2-4U2NF Series (Opto-less)

- No optocouplers, low component count
- Cooling by convection only (no fans or forced air)
- Rugged construction
- Conformal coating
- High input/output isolation
- Full electronic protection
- Customized versions available



SPECIFICATIONS

Input Voltage

48Vdc (42-60V) 125Vd (105-145V) For other input voltages, please consult factory.

Input Protection

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

Isolation

Corresponding to input/output voltage:

Min. 1000Vdc input to chassis Min. 2250Vdc input to output Min. 500VDC output to chassis

Standards

Designed to meet EN 60950-1 and corresponding UL and CSA standards

EMI

EN55032 Class A with margins

Switching Frequency 55kHz ±3kHz

Output Voltages

24V, 48V or 125Vdc 1000W continuous 12Vdc at 800W continuous Output is floating; either terminal can be grounded Consult factory for other voltages

Redundancy diode

Internal boards are connected parallel via redundancy diode

Line/Load Regulation

 $\pm\,1\%$ combined from 10% 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

Better than 1% of output voltage peak to peak or 0.2% Vrms (20MHz BW)

Output Overload Protection

Rectangular current limiting with short-circuit protection Thermal shutdown in case of insufficient cooling (self-resetting)

Output Overvoltage Protection

Second control loop

Efficiency

Typically 80-90% at full load depending on input/output combination

Operating Temperature Range

-20°C to 50°C for full specification Extended temperature ranges available on request

Temperature Drift

0.03% per °C, over operating temperature range

Cooling

By natural air convection

Environmental Protection

Ruggedizing Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

175,000 hours at 45 °C Demonstrated MTBF is significantly higher

Indicators

Green 'Output ON LED' visible through cooling slots

Control Input Optional

Alarm Output

None on standard version Output fail alarm Form C contacts installed on request

Package/Dimensions (H x W x D)

4U2NF: 178 x 140 x 309 mm (7" x 5.5" x 12")

Dimensions include heatsink fins
exclude connectors and L-brackets
Mounting holes are clear

Weight

6.8 kg (15 lb)

Connections

Barrier type terminal blocks or threaded studs

RoHS Compliance

Compliant

Warranty

Two years subject to application within good engineering practice

ABSOPULSE power supplies are designed and built to customer requirements. The specifications on this data sheet are generic guidelines only and are subject to change.

OEM of industrial and railway quality DC-DC converters, AC-DC power supplies and battery chargers, DC-AC sine-wave inverters, phase and frequency converters, DC-output

UPS systems and complete power systems in 19" and 23" racks since 1982. Custom or standard. ABSOPULSE is a BABT-approved Facility.



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