

FEATURES

- Three-phase AC input or 270VDC input
- High power DC output
- Efficiency of 90% typical
- Parallelable for higher output power
- 50ms hold-up for 700W[†] output when used in conjunction with VPXtra® HU700HV
- Conduction cooled at card edge
- Conformal coating on PWA
- Meets MIL-STD-704F transient performance



3U VPX High Power AC-DC Power Supply (VITA 62.1 release pending)

The Behlman VPXtra®800B COTS AC to DC power supply is a rugged, highly reliable, conduction cooled, switch mode unit built for high-end industrial and military applications. The VPXtra®800B is intended to convert either 115/200 VAC, 3-phase or 270VDC input IAW MIL-STD-704F to produce an isolated intermediate voltage for use by VPX back-end power supplies to produce final output voltage. The VPXtra®800B has a VPX 3U form factor and delivers up to 840 Watts of 28VDC power at up to 85°C rail temperatures, with additional power available at lower rail temperatures.

The VPXtra®800B power supply has no minimum load requirement and has overvoltage, overcurrent and short circuit protection as well as thermal protection. The power supply is designed to support the rigors of mission critical airborne, shipboard, vehicle and mobile applications.

Designed and manufactured with *Xtra-Cooling*, *Xtra-Reliable* Design and *Xtra-Rugged* construction makes the Behlman VPXtra®800B your best choice.

INPUT AC

Voltage: 100-125VAC, L-N, 3-phase
Frequency: 360-800 Hz

INPUT DC 250-280VDC

OUTPUT

Power: 840 Watts (85°C card edge) ‡
Voltage/Current: 28 VDC +/- 1% @ 30 Amps
Auxiliary: 3.3 VDC +/- 5% @ 0.4 Amps
Line Regulation: 1.0% maximum
Load Regulation: 5.0% maximum (Load > 10%)
PARD-Ripple & Noise: 3.3V: 50mV p-p (0-20 MHz)
28V: 1V p-p (0-20 MHz)
Efficiency: 90% typical, 50-100% load
Power Factor: 0.93 @ 840W

PROTECTIVE CIRCUITS

Over Voltage: Latched Shutdown
Over Current: Hiccup With Automatic Recovery
Short Circuit: Automatic recovery
Over Temp: Shutdown Auto Recovery

CONTROL SIGNALS

INHIBIT*: Output Off- active low
ENABLE*: Input On- active low
FAIL*: Output- out of specification

INDICATOR

DC STATUS LED: Bi-color LED (Red/Green)

† Assumes nominal 115/200VAC or 270VDC source voltage; contact factory for characteristics at other source voltages.

‡ Contact factory for higher power output at reduced rail temperatures

GENERAL CHARACTERISTICS

Isolation:

Input to Outputs: 1000 VDC

Input to Case: 1000 VDC

Outputs to Case: 500 VDC

+28V to +3.3V Aux: 500VDC

MTBF: 111,943hrs G_F @ 55°C,
IAW MIL HDBK-217F Notice 2

ENVIRONMENTAL

Temperature at card edge (IAW VITA 47)

Operating: -40°C to +85°C

Storage: -55°C to +105°C

Altitude: -1,500 to +60,000 ft.

MECHANICAL (1.0 inch pitch)

See O&C drawing OC94095-10 for connector details and pin assignments

Dimensions: 3.94"W x 6.63"L x .97"H

Weight: 1.9 lbs.

Connector: Behlman P/N: 11484

[Contact factory for mating connector]

COMPLIANCE

MIL-STD-704F

Including operation through normal transients

Shock: VITA 47 Class OS2

Vibration: VITA 47 Class V3

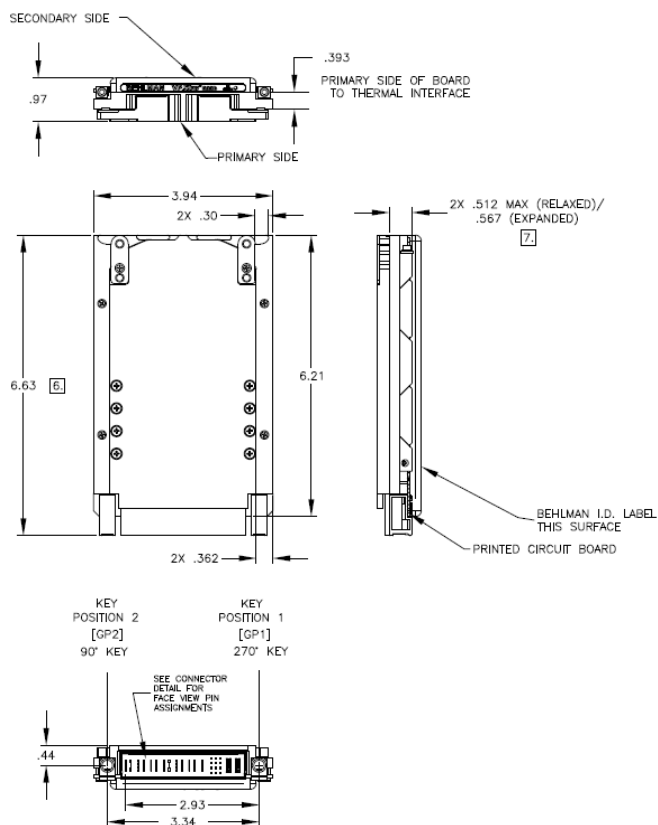
Humidity: VITA 47

Designed to meet the following:

EMI: MIL-STD-461G (Aircraft) *

* External filter required; contact Behlman Sales for details

For more details see VPXtra®800B data sheet



VITA Member

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