

FEATURES

- Three-Phase AC Input or 270VDC Input
- High Power DC Output – 28V/30A †
- Efficiency of 90% Typical
- Parallelable for Higher Output Power
- Output Hold-Up Options
 - 700W / 50 msec w/ VPXtra® HU700HV
 - 900W / 80 msec w/ VPXtra® HU700HV2
- Conduction Cooled at Card Edge
 - Convection-Cooled Versions Available
- Conformal Coating on PWA
- Meets MIL-STD-704F Transient Performance



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

The Behlman VPXtra®800B COTS AC to DC power supply is a rugged, highly reliable, 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. This model is available in conduction and convection cooled versions, the latter both air flow-over (AFO) and air flow-through (AFT).

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

240-290VDC

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

Overvoltage: Latched Shutdown
Overcurrent: Hiccup Mode
Short Circuit: Automatic recovery
Overtemperature: Shutdown w/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 Output: 1000 VDC
 Input to Case: 1000 VDC
 Output to Case: 500 VDC
 +28V to 3.3V_AUX: 500 VDC

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

MECHANICAL (1.0 inch pitch)

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

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

Weight: 1.95 lbs. maximum

Mating Connector: TE Connectivity 2332795-1 or similar IAW VITA 62.1

ENVIRONMENTAL COMPLIANCE

(IAW VITA 47.1 Class ECC4SL1)

Temperature

Operating: -40°C to +85°C

Storage: -55°C to +105°C

Altitude: -1,500 to +70,000 ft.

Shock: VITA 47.1 Class OS2

Vibration: VITA 47.1 Class V3

EMI: * MIL-STD-461G:

CE102, CS101, CS115, CS116

* Requires external filter, Behlman P/N 13530 or similar.

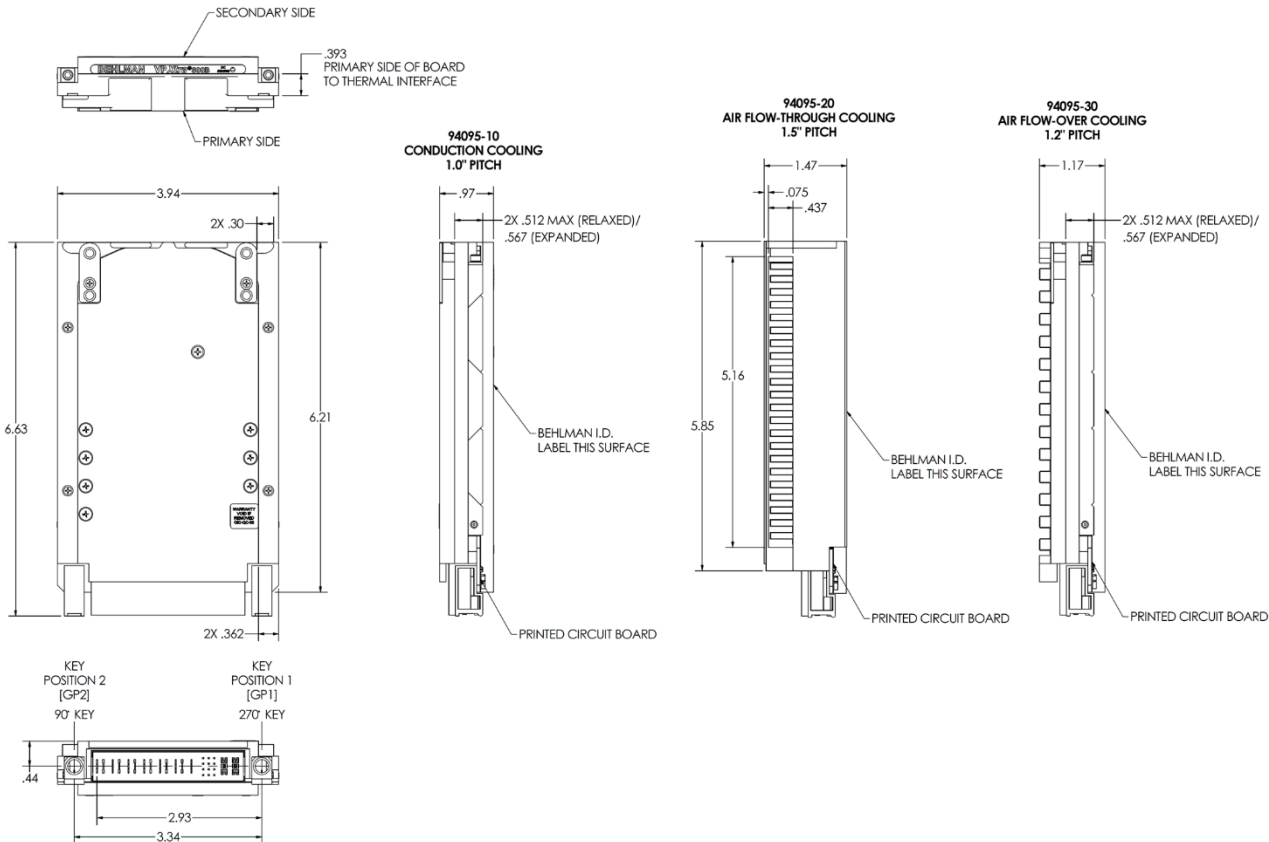
Designed to meet the following:

Humidity: VITA 47.1, up to 95% RH

Salt Fog: VITA 47.1, Class SL1

MIL-STD-704F: Including operation through normal transients

For more details see VPXtra®800B Data Sheet.



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VITA Member

www.behlman.com

ORBIT POWER GROUP
Behlman Electronics

Headquarters:
 80 Cabot Court, Hauppauge, NY 11788
 631 435-0410 800 874-6727
 Fax: 631 951-4341

sales@behlman.com

