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

<table>
<thead>
<tr>
<th>Voltage:</th>
<th>100-125VAC, L-N, 3-phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency:</td>
<td>360-800 Hz</td>
</tr>
</tbody>
</table>

INPUT DC

| Power:          | 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 Gf @ 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