

FEATURES

- Three-phase input w/ active PFC
- High power DC output
- Efficiency of 90% typical
- Conduction cooled at card edge
- Conformal coating on PCB



6U VITA 62.0 High Power, Three-Phase PFC AC-DC Front-End Module

Behlman's VPXtra®1500CS COTS AC to DC front-end module is a rugged, highly reliable, conduction cooled, switch mode unit built for high-end industrial and military applications. The VPXtra®1500CS is a VITA 62.0 6U front-end module that accepts a 115/200 VAC, 3-phase input, IAW MIL-STD-704 or 115 VAC Delta IAW MIL-STD-1399 and delivers 1500W of 33 VDC power. Input current harmonics comply with MIL-STD-461 (CE101) and MIL-STD-1399.

The VPXtra®1500CS front-end module has no minimum load requirement and has overvoltage and thermal protection. The front-end module is designed to support the rigors of mission critical airborne, shipboard, vehicle and mobile applications.

Designed and manufactured with *Xtra-Cooling*, *Xtra-Rugged* construction and *Xtra-High Reliability* makes the Behlman VPXtra®1500CS your best choice.

INPUT

Voltage: 115/200 VAC +/- 20% Wye
or 115 VAC +/- 20% Delta
Three-phase, 47-440 Hz

Power Factor: 0.99

OUTPUT

Power: 1500 Watts (with Wye input)
1000 Watts (with Delta input)

Voltage/Current: 33 VDC @ 46 Amps
Auxiliary: 3.3 VDC @ 0.4 Amps

Input Regulation: 0.5% max.

Load Regulation: 5.0% max. (0-100%)

PARD-Ripple & Noise: 300mVp-p (33V Output)
100mV (3.3V Output)
(0 – 20MHz Bandwidth)

Efficiency: 90% typical

CONTROLS

Inhibit: Output Off- active low
Enable: Input On- active low

(IAW VITA 62.0)

INDICATORS

AC OK: Green
DC OK: Green
OUTPUT Enable: Green
TEMP Warning: Red

PROTECTIVE CIRCUITS

Overvoltage: 110% typical
Overtemperature: Shutdown

GENERAL CHARACTERISTICS

ISOLATION:

Input to Output: 1250 VDC
 Input to Case: 1250 VDC
 Output to Case: 100 VDC

MTBF: 157,480hrs G_F @ 55°C,
 IAW MIL HDBK-217F Notice 2

ENVIRONMENTAL

Temperature at card edge (IAW VITA 47)

Operating: -40°C to +71°C
 Storage: -40°C to +105°C

MECHANICAL (1.0 inch pitch)

See O&C drawing 24150-1 for connector details
 and pin assignment

Dimensions: 9.19"L x 6.64"W x .97"H

Weight: 5.5 lbs.

Input Connector: P0, TE P/N: 6450833-7

Output Connector: P1, TE P/N: 6450839-6

COMPLIANCE

EMI: CE101-3 & -4 IAW MIL-STD-461
 CE102, Requires external filter

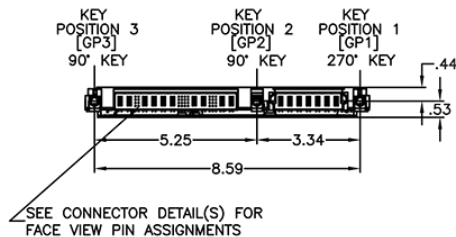
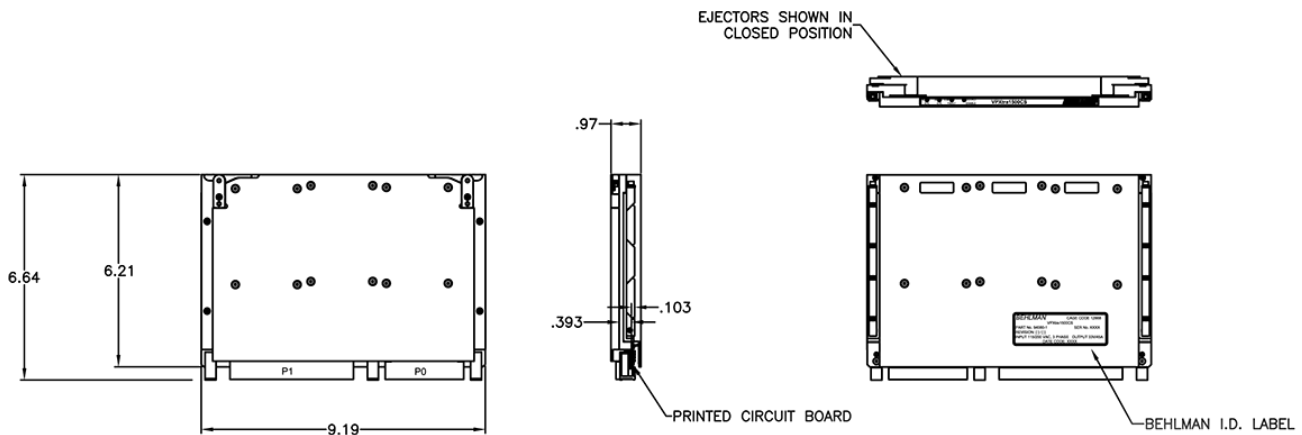
Designed to meet the following:

Shock: VITA 47 Class OS2

Vibration: VITA 47 Class V3

Humidity: VITA 47

For more detail, see VPXtra® 1500CS data sheet



VPXtra® is a trademark of Behlman Electronics.
 VPX is a trademark of VITA



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

