

FEATURES

- Open VPX VITA 62 compliant
- Single-phase active PFC input
- High power DC output
- Efficiency of 90% typical
- Conduction cooled at card edge
- Conformal coating on PCB



6U Open VPX VITA 62 High Power, Single-Phase PFC AC-DC Front-End Module

Behlman's VPXtra®1500CS3 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®1500CS3 is a VITA 62, Open VPX compliant, 6U front-end module that accepts a 85-265 VAC, 1-phase input, IAW MIL-STD-704, and delivers 1500W of 33 VDC power. Input current harmonics comply with MIL-STD-461 (CE101) and MIL-STD-1399.

The VPXtra®1500CS3 front-end module has no minimum load requirement and has over voltage and short circuit protection as well as over current 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®1500CS3 your best choice.

INPUT

Voltage: 85-265 VAC, 1-phase,
47-440 Hz

Power Factor: 0.99

OUTPUT

Power: 1500 Watts @ 220 VAC In
1000 Watts @ 115 VAC In

Voltage/Current: 33 VDC @ 46 Amps

Auxiliary: 3.3 VDC @ 0.2 Amps

Input Regulation: 0.5% max.

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

PARD-Ripple & Noise: 300mVp-p (1KHz-20MHz)

Efficiency: 90% typical

CONTROLS

Inhibit: Output Off- active low

Enable: Input On- active low

(IAW VITA 62)

INDICATORS

AC OK: Green

DC OK: Green

OUTPUT Enable: Green

TEMP Warning: Red

PROTECTIVE CIRCUITS

Over Voltage: 110% typical

Over Current: 120% typical

Short Circuit: Automatic recovery

Over Temp: Shutdown

GENERAL CHARACTERISTICS

ISOLATION:

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

MTBF: 95,000hrs G_b @ 50°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-X 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 (MIL-STD-461): CE101-3 & -4

CE102, Requires external filter

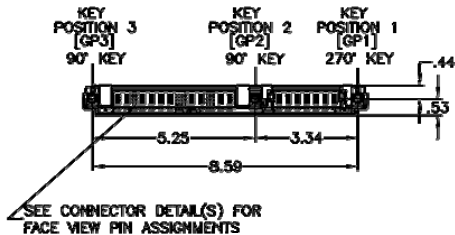
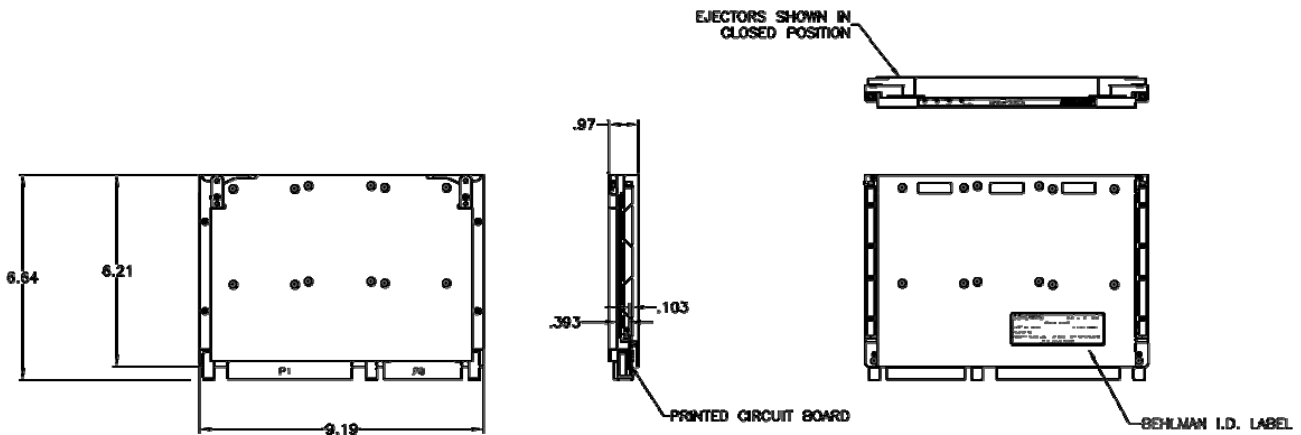
Designed to meet the following:

Shock: VITA 47 Class OS2

Vibration: VITA 47 Class V3

Humidity: VITA 47

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



For more detail, see VPXtra1500CS3.DS Data sheets



VITA Member

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