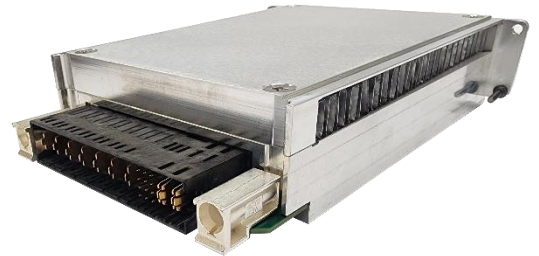


FEATURES

- Three-Phase AC Input or 270VDC Input
- High Power DC Output – 28V/35A
- 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
- Air Cooled I.A.W. VITA48.8-2022
- Conformal Coating on PWA
- Meets MIL-STD-704F Transient Performance

VPXtra AIR FLOW-THRU



3U VPX High Power AC-DC Power Supply [VITA 62.1]

The Behlman VPXtra®800TB COTS AC to DC power supply is a rugged, highly reliable, switch mode unit built for high-end industrial and military applications. The VPXtra®800TB 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 VPXtra800TB has a VPX 3U form factor and delivers up to 980 Watts of 28VDC power when cooled with up to 55°C air at a mass flow rate of 1.2lb/min.

The VPXtra®800TB 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®800TB your best choice.

INPUT AC

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

INPUT DC 240-290VDC

OUTPUT

Power: 980 Watts
Voltage/Current: 28 VDC +/- 1% @ 35 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 @ 980W

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)

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 (1.5 inch pitch)

See O&C drawing OC94095-20 for connector details and pin assignment

Dimensions: 4.98"W x 6.68"L x 1.47"H

Weight: 2.70 lbs. maximum

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

ENVIRONMENTAL COMPLIANCE

(IAW VITA 47.1 Class EFC2SL1)

Temperature

Operating: -40°C to +55°C

(inlet air temperature, assuming a mass flow rate of 1.2lb/min at worst case; consult data sheet for additional airflow details)

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.

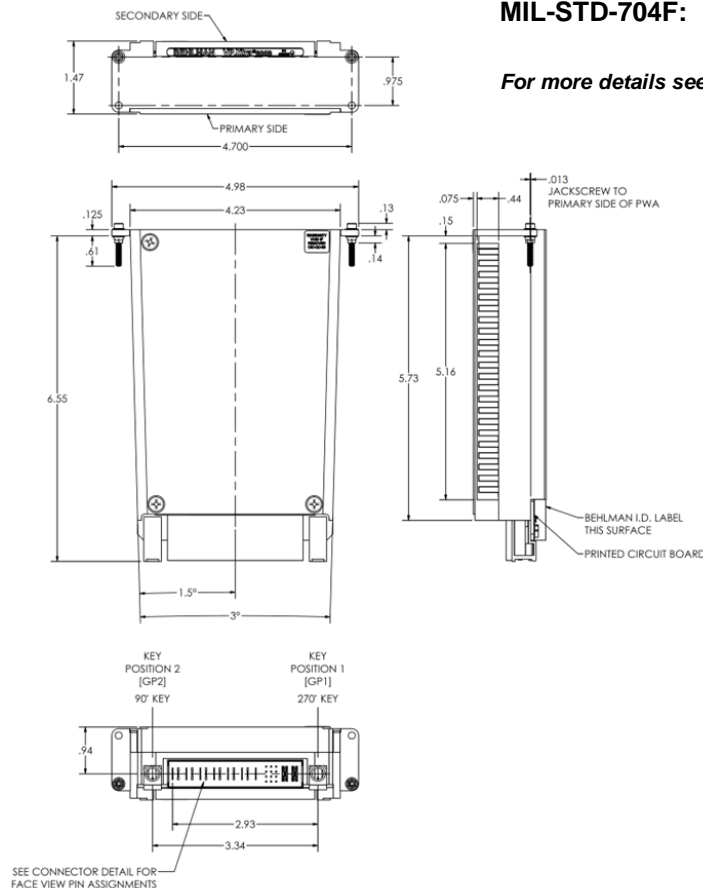
Designed to meet the following:

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®800TB Data Sheet.



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VITA Member

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