

VPX-700-3P-CONV-10HP

700 Watts

Convection Cooled

OpenVPX VITA 62 Compliant



KEY FEATURES:

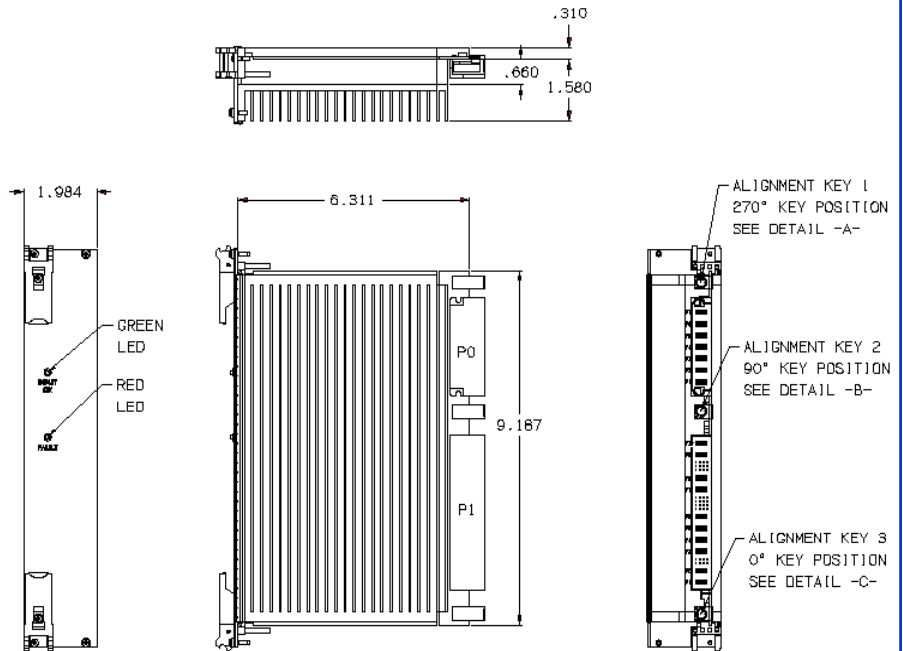
- 700 Watts in a 6U x 10 HP x 160mm Modular Design
- 3-Phase AC Input with Power Factor Correction Exceeding 0.95 at Full Load
- Meets MIL-STD-704 A with External Capacitance
- VITA 62 Outputs; +12V/30A, +5V/40A, Aux_+3.3V/40A, Aux_+12V/1A, Aux_-12V/1A
- No Minimum Load Required
- Custom Input/Output Configurations Available
- N+1 Redundant with Internal Oring FET's/Diodes
- VITA 62 Convection Cooled Style
- Side Covers Support Two-Level Military Maintenance Requirements
- Ruggedized Mechanical Design
- One Year Warranty
- Greater than 150,000 Hrs MTBF
- Proudly Made in U.S.A.
- Standard Unit Pricing; 10 pieces \$11,949* / 25 pieces \$11,890* / 50 pieces 11,860*

*2023 dollars

VPX-700-3P-CONV-10HP

P0 - AC/DC INPUT CONNECTOR TE CONNECTIVITY P/N 6450849-6	
PIN NO.	SIGNAL
P7	ØA
P6	ØB
P5	ØC
P4	NEUTRAL
P3	N/C
P2	N/C
P1	CHASSIS GND

P1 - DC OUTPUT CONNECTOR TE CONNECTIVITY P/N 6450849-6			
PIN NO.	SIGNAL	PIN NO.	SIGNAL
P10	+12V/30A	D5	SDA
P9	+12V/30A	A4	GA3*
A9	+12V_SENSE	B4	GA2*
B9	+12V_SENSE	C4	GA1*
C9	+5V_SENSE	D4	GA0*
D9	N/C	A3	N/C
A8	+12V_SENSE_RTN	B3	+12V_AUX/1A
B8	+12V_SENSE_RTN	C3	NED
C8	+5V_SENSE_RTN	D3	NED_RTN
D8	N/C	P6	+5V/40A
A7	N/C	P5	+5V/40A
B7	N/C	P4	POWER_RTN
C7	N/C	P3	POWER_RTN
D7	SIGNAL_RTN	A2	VBAT
P8	POWER_RTN	B2	FAIL*
P7	POWER_RTN	C2	[INHIBIT]*
A6	N/C	D2	ENABLE*
B6	N/C	A1	N/C
C6	-12V_AUX/1A	B1	N/C
D6	SYSRESET*	C1	N/C
A5	GAP*	D1	N/C
B5	GA4*	P2	+3.3V_AUX/40A
C5	SCLK	P1	POWER_RTN



Nominal Input Voltage Frequency	115/200 Vac 3-Phase, 2.5A nominal. 47-63 Hz , 400Hz.
Operational Input Voltage Range	The steady-state voltage average for the three phases is within the limits of MIL-STD-704 A.
Input Load Balance	Current loading for any phase does not exceed the average of the currents in all 3 phases by more than 5%.
Inrush Current	Less than 4 msec. 60 amperes @ 200 Vac
Fusing	(3 X 6.3 Ampere)/250 Vac, Very fast acting. Internal ceramic body fuses.
Hold up time	20msec minimum after loss of AC Input at full load and any input.
Efficiency	85% typical
Turn on time	1 sec max. from power up.
Line and Load Regulation	±2% over AC input range and 0 to 100% load change.
Minimum Load	No minimum load required.
Ripple & Noise	Through 20MHz 1% max. or 50mv whichever is greater for all outputs, peak to peak, with coaxial probe and 0.1uF/10uF capacitors at the connector.
Transient Response	Output maximum excursion of ± 5% for 25% load step. Recovery less than 500 µsec.
Overshoot	Less than 5%.
Output Isolation	Isolated from chassis ground, 100Vdc.
Input/Output Isolation	1500Vdc from input to both chassis/outputs.
Reverse Voltage	Protected against reverse voltage to supply current rating.
Overvoltage Protection	Shutdown at 130% of nominal Vout. Recycle input power to reset.
Overtemperature Protection	Unit shuts down if overheated. Recycle input.
Leakage Current	3.5mA max at 200Vac.
Current Limiting	All outputs protected with current limit. Automatic recovery when overload or short is removed.
Redundant	Full power N+1 redundant with integral Oring FET's/Diodes.

Paralleling	Two or more supplies can be operated in parallel and will share +12V & +5V current to within ±10% of each other.
Remote Sense	Compensates for up to 0.5V total distribution voltage drop on the +12V and +5V outputs.
Enable*	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
INHIBIT*	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
SYSRESET*	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
FAIL*	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
NED	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
VBAT	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
Geographical Addressing	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
Protocol (I²C)	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
Indicators	Green LED indicating Input OK, Red LED indicating a power supply fault.
Cooling	400 Lfpm of forced air is required through the heat exchanger.
Operating Temperature	-40°C to 65°C operating temperature with specified airflow.
Stability	All outputs 0.1% for 8 hrs. after 30 minute warm-up.
Humidity	Up to 95% non-condensing.
Storage Temperature	-55°C to 105°C.
Connectors	VITA 62 compliant
Size	6U x 10HP x 160mm Weight: 6 lbs.
EMC	Designed to meet Mil-Std-461F (excluding CE101) with SPI's external filter, Top Assembly 25870, or equivalent.
Common Options	Conformal coating with Paylene & special output configurations. Consult factory for more details on a tailored solution which meets your requirements.