

6kVA, Industrial Quality DC-AC Sine Wave Inverter 600Vdc 3-Phase Output CTP 6K-48/600-2X3U7 Series

- 3-Phase sinusoidal output voltage
- Filtered input/output
- Cooling by high quality internal fans
- 19" rack or chassis-mount
- Full electronic protection
- Rugged, field-proven design concept



This rugged modular DC-AC inverter system uses field-proven microprocessor-controlled technology to deliver the required output power with pure sine wave output voltage. The inverter delivers a 3-phase output of 600Vrms (L-L) from a 48Vdc input. The output neutrals are internally connected to chassis (GND) in "Y" configuration. Input modules convert the input voltage to an internal DC voltage, which feeds the DC-AC output module. The unit is built with two 3U7 modules. The interconnections between modules are made with cables with connectors. All modules are built with internal power cards. The complete system has six CDC 1000 DC-DC cards and six MSI 2300 cards. The high frequency conversion enables a compact construction, low weight and high efficiency. The input and output are filtered for low noise. High quality built-in fans provide sufficient airflow for operation within the specified temperature range without de-rating. The fans draw air into the unit, and exhaust at the terminal side of the unit. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to an internal cooling plate. Conformal coating provides protection against humidity and airborne contaminants. Full electronic protection, generous design headroom and the exclusive use of components with established reliability also contribute to high MTBF. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage 48Vdc nominal 42-60Vdc operating range Input current: 171A max. Consult factory for other inputs	Output Voltage 600Vrms (L-L)/ 3-phase continuous at 60Hz. (50Hz also available). All neutrals are internally connected to chassis (GND) in "Y" configuration Consult factory for other voltages, frequencies and options	Output Overvoltage Protection Output voltage is limited by internal supply voltage	Indicators None
Input Protection Inrush current limiting Varistors Reverse polarity protection Internal safety fuse links Lower voltage than the specified minimum input will not damage the unit	Output Wave Form Sinusoidal	Efficiency Depends on input and output voltage combination. Min. 80% at full load	Control Input None Remote shutdown or enable option
Isolation 1000Vdc input to chassis 2250Vdc output to chassis Output neutrals are connected to the chassis internally	Total Harmonic Distortion Less than 5% at full load	Operating Temperature Range 0° C to +50° C for full specification Extended temperature ranges available	Alarm Output None Option: output fail alarm (Form C)
Standards Designed to meet UL 458 and EN 61010-1	Line/Load Regulation ±6% from no load to full load	Temperature Drift 0.05% per ° C over operating temperature range	Package/Dimensions (H x W x D) <u>Chassi mount assembly (2X3U7)</u> 267 x 432 x 382 mm (6U) 10.5 x 17" x 15" <u>19" rack-mount assembly (2X3U7/19)</u> 267 x 483 x 382 mm (6U) 10.5 x 19 x 15"
EMI EN 55032 Class A with margins Consult factory for higher level of filtering	Load Crest Factor 2 at 90% load	Cooling High quality built-in fans draw air into the unit	Weight Approx. 24 kg (53 lbs.)
	Output Noise High frequency ripple is less than 500mVrms (20MHz BW)	Environmental Protection Basic ruggedizing Conformal coating	Connections Inputs: Threaded studs dual M6, stud boots included Output: 4-pole terminal block, Phoenix FRONT type Interconnections: cables with connector
	Output Overload Protection Current limiting with short circuit protection Thermal shutdown with automatic recovery in case of insufficient cooling	Shock/Vibration IEC 61373 Cat 1 A&B	RoHS Compliance Compliant
		Humidity 5 - 95% non-condensing	Warranty Two years subject to application within good engineering practice. Contamination related failures and shipping cost excluded.
		MTBF Min. 85,000 hours at 45°C Demonstrated MTBF is significantly higher Fans excluded	

ABSOPULSE power supplies are designed and built to customer requirements. The specifications on this data sheet are generic guidelines only and are subject to change
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