

# CTP3K SERIES

DC / AC 3 Phase Sine Wave Inverters: 3000 VA



6U x 19" chassis  
(4 x 3U3)

## General Specifications

<b>Input Voltage</b>	24VDC, 36VDC, 48VDC, 120VDC, 250VDC ♦ Other input voltage options on request
<b>Input Range</b>	±15% of input, other options on request
<b>Input Protection</b>	Inrush current limiting Internal safety fuse, Reverse Polarity Protection
<b>Isolation</b>	For input > 60vdc : Input – Output: 2250vdc For input <60vdc: Input – Output: 1500vdc ♦ Other options on request
<b>EMI</b>	EN55011 Class A conducted
<b>Immunity</b>	EN 61000-4
<b>Output voltage</b>	See table: All neutrals are internally connected to chassis (GND) in "Y" configuration. (Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms)
<b>Output Waveform</b>	Sinusoidal
<b>Harmonic Distortion</b>	Less than 5% at 100% load.
<b>Output Freq.</b>	50Hz, 60Hz, 400Hz options
<b>Load Crest Factor</b>	Maximum 2.5% at 90% load
<b>Output Power</b>	3000VA
<b>Regulation</b>	Line / Load: ±6% from 10% to 100% load step. ±2% option.
<b>Output Noise</b>	High Frequency ripple is better than 500mVrms ( 20MHz BW )
<b>Protection</b>	Current limiting with short circuit protection Self re-setting thermostat for thermal protection
<b>Output Over Voltage Protection</b>	Output voltage is limited by internal supply voltage
<b>Efficiency</b>	Input voltage / model dependent typically 80% at 100% load
<b>Operating Temp</b>	0°C to +50°C at rated load. Other options on request
<b>Cooling</b>	On Board Fans
<b>Shock &amp; Vibration</b>	Basic ruggedizing
<b>Humidity</b>	5-95% non-condensing
<b>MTBF</b>	>95,000 hrs at 45°C
<b>LED Indicator</b>	Optional
<b>Connector</b>	Input: Terminal block or threaded studs depending on input voltage Output: Terminal block Interconnections: Terminal blocks
<b>Dimensions</b>	Size varies from 3U x 19" to 6U x 19" depending on input/output combination
<b>Weight</b>	15-30kg ( model dependent )

## Features

- ♦ 3 phase output
- ♦ Sinusoidal output waveform
- ♦ 3000VA output power
- ♦ Frequency options 50Hz / 60Hz / 400Hz
- ♦ Wide range of input options: 24 ~ 250VDC
- ♦ Optional output fail alarm on some models
- ♦ Rugged design for harsh environments
- ♦ Full electronic protection
- ♦ Non standard input voltage options

## Description

The **CTP 3K** Series is a rugged modular DC/AC inverter system that uses a microprocessor controlled, field-proven technology to deliver 3-Phase, 3000VA continuous output power.

It is a mature design with a track record in numerous applications. The standard 3-phase outputs are 208Vrms, 380Vrms or 400Vrms (L-L).

Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms. All output neutrals are internally connected to chassis (GND) in "Y" configuration. The number of modules depends on the input/output combination.

The unit in the photograph is a typical example of one configuration. Input modules convert the input voltage to an internal DC voltage, which feeds the DC/AC output module.

The high frequency conversion enables a compact construction, low weight and high efficiency. The unit has full electronic protection. The input and output are filtered for low noise. The use of components with established reliability results in high MTBF. Cooling is by built-in fans, which draw air into the unit.

## Options ( may not be available on all combinations )

<b>Alarms</b>	Output Fail Alarm: voltage free relay contacts
<b>Remote Inhibit</b>	Remote ON / OFF
<b>Ruggedized</b>	Conformal coating and Ruggedization for use in harsh environments.
<b>Slow Start</b>	Slow start up option for powering fans
<b>Connector</b>	A variety of terminals / connectors available to suit special customer requirements

**Model No Example:**  
**CTP3K-4E-xxxx** ( 48VDC / 230VAC / 415VAC 50Hz

CTP	Power	Input Vdc	Output	Factory Allocated
CTP	3K	2 = 24V	A = 115V / 208V 60Hz	
		3 = 36V		
		4 = 48V	E = 230V / 415V 50Hz	
		7 = 72V	M = 115V/ 208V 400Hz	
		9 = 96V		
		108 = 108V		
5 = 125V				
		6 = 250V		

1. Standard input / Output combinations are illustrated.
2. Non standard combinations are available on request
3. Final Part no will be allocated at time of order to reflect customer specifications and options.