

RCTP3000R Series 3-Phase Inverter



Pure sinewave



3 - Phase output



High frequency technology



Light weight, compact size



Full electronic protection



Optional extended temperature range



Optional output fail alarm (Form C)

Applications

- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

Sinewave Inverter

RCTP3000R Series

Description

The RCTP3000 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.

The unit is manufactured at our plant under strict quality control.

The system can be customized for exact requirements.

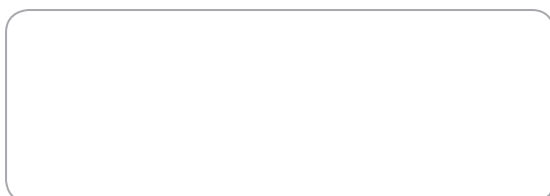
Features

- Input is filtered to EN 55022 Class A
- Sinusoidal wave shape
- 3000VA of output power
- Full electronic protection
- High reliability
- Telecom quality
- Field-proven design topology

Specifications (Specifications Subject to Change Without Notice)

Input Voltage	24VDC, 36VDC, 48VDC, 125VDC, 250VDC +/-15% are standard Other inputs available, please consult factory
Input Protection	Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than specified input min. will not damage unit
Isolation	Compliant to input and output voltages according to the corresponding standards
Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
EMI	EN 55022 Class A Consult factory for higher level of filtering
Output Voltage	208Vrms (L-L)/ 3-phase continuous at 60 or 400Hz or 380Vrms or 400Vrms (L-L)/ 3-phase continuous at 50 or 60Hz. All neutrals are internally connected to chassis (GND) in "Y" configuration (Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms) Consult factory for other voltages, frequencies and options
Wave Form	Sinusoidal
Total Harmonic Distortion	Less than 5% at full load
Line / Load Regulation	Maximum $\pm 6\%$ from no load to full load.
Load Crest Factor	Maximum 2.5 at 90% load
Output Noise	High frequency ripple is better than 500mVrms (20MHz BW)
Output Overload Protection	Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient cooling
Output Overvoltage Protection	Output voltage is limited by internal supply voltage
Efficiency	Depends on input and output voltage combination. Typically 78% at full load
Operating Temperature Range	0°C to +50°C for full specification without derating derating linearly 2.5% per °C rise above +50°C to +70°C max. Extended temperature range available
Temperature Drift	0.05% per °C over operating temperature range
Cooling	Built-in fan draws air into the unit
Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating as option
Shock/Vibration	IEC 61373 Cat 1 A&B
Humidity	5 - 95% non-condensing
MTBF	Min. 95,000 hours at 45°C, demonstrated MTBF is significantly higher Fan excluded
Indicators	None
Control Input	None Remote shutdown as option
Alarm Output	None Option: output fail alarm (Form C)
Package / Dimensions	19" rack-mount or chassis mount assembly. Size varies from 3U x 19" to 6U x 19" depending on input/output combination
Weight	For 6U x 19" chassis: 28 kg
Connections	Input: Terminal block or threaded studs depending on input voltage Output: Terminal block Interconnections: Terminal blocks
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



RIPEnergy®

The power conversion company

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