

RIPEENERGY The Power Conversion Company

RCTP6000 3-PHASE INDUSTRIAL SINEWAVE INVERTER

SERIES RCTP6000

The RCTP6000 Series is a rugged modular DC/AC inverter system that uses a microprocessor controlled, field-proven technology to deliver 3-Phase, 6000VA 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). Phaseto-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms.

All output neutrals are internally connected to chassis (GND) in "Y" configurati-

The number of modules depends on the input/output combination.

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.

APPLICATIONS

- Industrial Controls
- Mining
- Oil Rigs
- Steel Mills
- Marine & other rugged environments
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power
- Telecom Power Plants
- Railway / Transportation
- Military Applications
- Manufacturing Location
- OEM Applications

FEATURES

- 3-Phase sine wave output voltage
- Up to 250Vdc input voltage
- Field-proven rugged design
- Cooling by internal fans
- Filtered input and output
- Full electronic protection
- Compact size
- 6000VA of output power



Sinewave





3-Phase

output



technology







Full electronic

protection

Optional Remote shutdown



Extended temperature range



Optional Output fail alarm (Form C)

SPECIFICATIONS

Input Voltage	48Vdc 125Vdc 250Vdc ± 15% are standard Consult factory for other inputs
Input Protection	Inrush current limiting Varistor Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
Isolation	Compliant to input and output voltages according to the corresponding standards
Output Voltage	380Vrms or 400Vrms (L-L)/ 3-phase continuous at 50 or 60Hz or 208Vrms (L-L)/ 3-phase continuous at 60 or 400Hz All neutrals are internally connected to chassis (GND) in "Y" configuration Phase-to-neutral voltages can also be used Consult factory for other voltages, frequencies and options
Output Wave Form	Sinusoidal
Total Harmonic Distortion	Less than 5% at full load
Line/Load Regulation	Maximum ± 6% from no load to full load.
Load Crest Factor	2.5 at 90% load
Output Ripple Noise	High frequency ripple is less than 500mVrms (20MHz BW)
Efficiency	Depends on input and output voltage combination. Typically 78% at full load
Output Overload Protection	Current limiting with short circuit protection Thermal shutdown with automatic recovery in case of insufficient cooling
Output Overvoltage Protection	By internal supply voltage limiting

Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458, EN 60950-1, EN 62368-1 and CE
EMI	EN 55032 Class A
Operating Temperature	0 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 on request
Humidity	5 - 95% non-condensing
Temperature Drift	0.05% per °C over operating temperature range
Cooling	By high quality built-in fans by additional conduction via the baseplate
Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating available as option
Shock/Vibration	IEC 61373 Cat 1 A&B
Dimensions	4x3U3: 6U x 19" rack-mount or chassis mount assembly 432 x 266x 407 mm (W x H x L) including connectors
Weight	28 Kg
Connections	Input: Terminal block or threaded studs depending on input voltage Output: Terminal block Interconnections: Terminal blocks
MTBF	95,000 hours at 45°C Demonstrated MTBF is significantly higher Fans excluded
Indicators	None
Control Input	None Remote shutdown as option
Alarm output	None Optional output Fail Alarm (Form C)
RoHS Compliance	Fully compliant
Warranty	2 years