



RCTP10000 3-PHASE INDUSTRIAL SINEWAVE INVERTER

SERIES RCTP10000

This rugged modular DC/AC inverter system uses microprocessor controlled, field-proven technology to deliver 3-Phase, 10kVA continuous output power with pure sine wave output voltage.

The standard 3-phase outputs are 380Vrms or 400Vrms (L-L). Phase-to neutral voltages of 220Vrms or 240Vrms can also be used.

All 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 high frequency conversion enables a compact construction, low weight and high efficiency.

The input and output are filtered for low noise.

Cooling is by high quality built-in fans, which draw air into the unit and the exhaust exits at the rear of the unit.

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.

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
- 10000VA of output power



Pure Sinewave



3-Phase output



High frequency technology



Light weight, compact size



Full electronic protection



Optional Remote enable or shutdown



Optional 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	2250Vdc input to chassis
Output Voltage	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 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 80% 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 with margins
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	19" rack-mount assembly 9U x 19" x 16" (H x W x D)
Weight	approx. 39 Kg
Connections	Inputs: Terminal block on each input module Output: Terminal block Interconnections: Terminal block
MTBF	85,000 hours at 45°C Demonstrated MTBF is significantly higher Fans excluded
Indicators	None
Control Input	None Remote shutdown or enable as option
Alarm output	None Optional output Fail Alarm (Form C)
RoHS Compliance	Fully compliant
Warranty	2 years

