

RCTP1000 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

RCTP1000 Series

Description

This rugged modular DC/AC inverter system uses microprocessor controlled, field-proven technology to deliver 3-Phase, 1000VA continuous output power with pure sine wave output voltage.

A new design topology simplifies the circuitry and enables a significantly more compact construction, lower weight, lower cost and higher MTBF than earlier designs.

The standard 3-phase outputs are 208Vrms, 380Vrms or 400Vrms (L-L) at the required frequency.

Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms. 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.

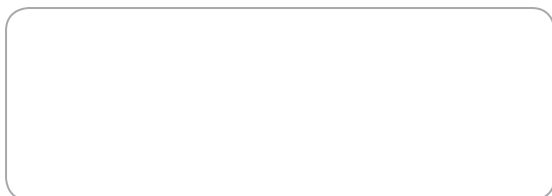
Features

- Input is filtered to EN 55022 Class A
- Sinusoidal wave shape
- Isolated, floating output
- 1000VA of output power
- Full electronic protection
- High reliability
- Telecom quality
- Field-proven design topology

Specifications (Specifications Subject to Change Without Notice)

Input Voltage	24VDC, 48VDC, 110VDC, 125VDC are standard Other inputs available, please consult factory
Input Protection	Inrush current limiting Varistors 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
Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN 60950-1
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 (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 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 80% 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	High quality built-in fans draw air into the unit
Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating available 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 or enable as an option
Alarm Output	None Output fail alarm (Form C) as option
Package / Dimensions	U5712: 127 x 191 x 345 mm including terminal blocks and fans
Weight	6.5kg
Connections	Input: Terminal block Output: Terminal block
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



RIPEnergy®

The power conversion company

RIPEnergy AG
Wägitalstrasse 24
CH-8854 Siebnen
Switzerland

Ph +41-(0)43-818 53 85
Fax +41-(0)43-818 53 87
www.ripenergy.ch