

RCTP300 Series 3-Phase Inverter



Pure sinewave



3 - Phase output



Convection / Conduction cooling



High frequency technology



Light weight, compact size



Full electronic protection



Optional extended temperature range

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

RCTP300 Series

Description

This rugged industrial quality DC-AC inverter uses field-proven, microprocessor controlled high frequency PWM technology to generate the required output power with 3-phase sine wave output voltage.

The use of high frequency conversion enables a compact construction, low weight and high efficiency. The input and output are filtered for low noise. Cooling is by conduction via baseplate.

Additional cooling is achieved by natural convection through the cooling slots.

All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate.

This also provides exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants.

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.

A railway quality version of this design, the RCTP300, is also available

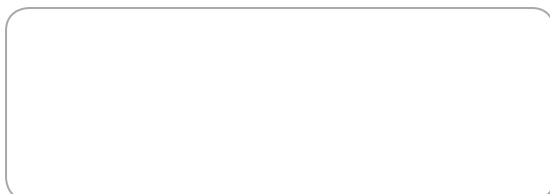
Features

- Input is filtered to EN 55022 Class A
- Sinusoidal wave shape
- Isolated, floating output
- 300VA 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, 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	According to input/output as minimum 700Vdc input to chassis 1500Vdc input to output 1000Vdc output to chassis Floating output, Neutral can be grounded if required
Standards	Designed to meet C22.2 No. 107.1 - 01, UL458 and EN60950-1
EMI	EN55022 Class A with margins
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 230Vrms) 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
Output Overvoltage Protection	Output voltage is limited by internal supply voltage
Efficiency	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	By conduction via baseplate and by natural convection
Environmental Protection	Basic ruggedizing, Conformal coating Full ruggedizing available as option
Shock/Vibration	IEC 61373 Cat 1 A&B
Humidity	5 - 95% non-condensing
MTBF	Min. 110,000 hours at 45°C, demonstrated MTBF is significantly higher
Indicators	None
Control Input	None Remote shutdown or enable as an option
Alarm Output	None
Package / Dimensions	F7: 254 x 67 x 351mm Mounting holes are clear
Weight	2.2kg
Connections	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
www.ripenergy.ch