

RIPEENERGY The Power Conversion Company

RCTP1000-S 3-PHASE INDUSTRIAL SINEWAVE INVERTER

SERIES RCTP1000-S

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

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 high quality built-in fans and by additional conduction via the baseplate. The fans draw air into the unit.

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.





3-Phase

output







compact size





protection

Full electronic Optional Remote enable or

shutdown



Extended temperature range



Sinewave

Optional Output fail alarm (Form C)

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 125Vdc input voltage
- Field-proven rugged design
- Cooling by internal fans
- Filtered input and output - Full electronic protection
- Compact size
- 1000VA of output power

SPECIFICATIONS

Input Voltage	24Vdc 48Vdc 110Vdc 125Vdc ± 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 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 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
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 Conformal coating Full ruggedizing available as option
Shock/Vibration	IEC 61373 Cat 1 A&B
Dimensions	3U3SF: 127 x 191 x 318 mm (W x H x L) excluding terminals and L-brackets
Weight	6.5 Kg
Connections	Input: Terminal block Output: Terminal block
MTBF	95,000 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

