

FCST6000R Series AC/AC Single-Phase to 3-Phase Frequency Converter



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

AC/AC Converters

FCST6000R Series

Description

The FCST 6000 Series is a rugged modular AC/AC frequency converter system uses field-proven technology to deliver 3-Phase, 6000VA continuous output power.

It is a mature design with a track record in numerous of applications.

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

All output neutrals are internally connected to chassis (GND) in "Y" configuration.

The input modules perform the AC to DC voltage conversion. The output module performs the DC voltage to 3-phase AC voltage conversion. 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 FCST6000 is manufactured at our plant under strict quality control.

The system is customized for exact requirements.

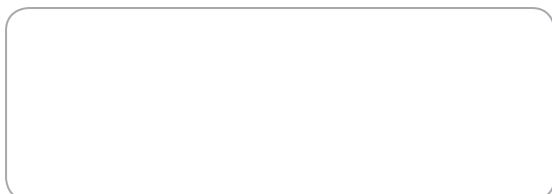
Features

- Input is filtered to EN 55022 Class A
- Sinusoidal wave shape
- Isolated, floating output
- 6000VA of output power
- Full electronic protection
- High reliability
- Telecom quality
- Field-proven design topology

Specifications (Specifications Subject to Change Without Notice)

Input Voltage	115 or 230Vac, +/-15%, 47 ... 410Hz are standard Consult factory for other voltages, frequencies and options
Input Protection	Inrush current limiting Varistors Internal safety fuse Lower voltage than specified input min. will not damage 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 EN60950
EMI	EN 55022 Class A as a minimum
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: 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 2.5 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 78% 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	Built-in fan draws air into the unit
Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating 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 as option
Alarm Output	None Option: output fail alarm (Form C)
Package / Dimensions	19"rack-mount or chassis-mount assembly 6U x 19" (4 x 3U3) chassis: 264 x 483 x 432 mm including connectors
Weight	28 kg
Connections	Input: Terminal block or threaded studs depending on input voltage Output: Terminal block Interconnections: Terminal blocks
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



RIPEnergy®

The power conversion company

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