RIPEENERGY
The Power Conversion Company

FCST1500 INDUSTRIAL FREQUENCY CONVERTER

SERIES FCST1500

The FCST1500 Series rugged AC/AC frequency converter uses a field-proven design to deliver 3-Phase, 1500VA continuous output power.
It is a mature design with a track record in hundreds of applications.

The standard 3-phase outputs are 208Vrms, 380Vrms or 400Vrms (L-L). Phase-to-neutral voltages can also be used: 115Vrms, 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 unit has full electronic protection.

This design is optimized for low component count and high efficiency.

The use of components with established reliability results in high MTBF.

The FCST1500 is manufactured at our plant under strict quality control.

Customized versions are also available.

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)

APPLICATIONS

- Aviation
- Industrial Controls
- Telecom Power Plants
- Railway / Transportation
- Military Applications
- Marine
- Mining
- Oil Rigs
- Steel Mills
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power
- Manufacturing Location
- OEM Applications

FEATURES

- 3-Phase sine wave output voltage
- Field-proven rugged design
- Cooling by internal fans
- Filtered input and output
- Full electronic protection
- Compact size
- 1500VA of output power

SPECIFICATIONS

Input Voltage	95 - 264Vac universal input with PFC 47 ... 410Hz are standard Consult factory for other inputs
Input Protection	Inrush current limiting Varistor 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	208Vrms (L-L)/3-phase at 60 or 400Hz or 380Vrms or 400Vrms (L-L)/ 3-phase at 50 or 60Hz. All neutrals are internally connected to chassis (GND) in "Y" configuration (Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms) 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 78% 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	Output voltage is limited by internal supply voltage

Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458, EN 60950, EN 62368-1 and CE
EMI	EN 55032 Class A Class B filtering available
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	Built-in fans draw air into the unit
Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating as option
Shock/Vibration	IEC 61373 Cat 1 A&B
Dimensions	3U7: 3U x 19" rack-mount or chassis mount assembly 432 x 132 x 407 mm (W x H x L) including connectors
Weight	14 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 as option
Alarm output	None Optional output Fail Alarm (Form C)
RoHS Compliance	Fully compliant
Warranty	2 years

Version 01.12.20
Specifications Subject to Change Without Notice

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