



FCST3000 INDUSTRIAL FREQUENCY CONVERTER

SERIES FCST3000

The FCST3000 Series rugged AC/AC frequency converter uses a field-proven design to deliver 3-Phase, 3000VA 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 FCST3000 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
- 3000VA 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 $\pm 6\%$ 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 76% 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 and EN 60950
EMI	EN 55022 Class A as a minimum
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	4x3U3: 6U x 19" rack-mount or chassis mount assembly 432 x 266x 407 mm (W x H x L) including connectors
Weight	25 Kg
Connections	Input: Terminal block or threaded studs depending on input voltage Output: Terminal block Interconnections: Terminal blocks
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

