



FCTS1500 INDUSTRIAL FREQUENCY CONVERTER

SERIES FCTS1500

The FCTS1500 Series rugged AC/AC frequency converter uses a field-proven design to deliver single-phase, 1500VA continuous output power from a 3-phase line outlet. It is a mature design with a track record in hundreds of applications.

The standard single-phase output is 220Vrms / 400Hz.

The output neutral is internally connected to chassis (GND).

The input modules perform the AC to DC voltage conversion. The output module performs the DC voltage to single-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 FCTS1500 is manufactured at our plant under strict quality control.

Customized versions are also available.

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

- Single-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



Pure Sinewave



High frequency technology



Light weight, compact size



Full electronic protection



Optional Remote shutdown



Optional Extended temperature range



Optional Output fail alarm (Form C)

SPECIFICATIONS

Input Voltage	380Vac /50Hz three phase (4 wire) 196-264V range 47 – 63Hz 3.3A rms max per phase 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	Input to chassis: 2250Vdc
Output Voltage	220Vac single phase / 6.8A rms continuous at 400Hz Output neutral is internally connected to chassis Floating output is available as option. Consult factory for other voltages and frequencies
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	Min. 80% at full load
Output Overload Protection	Current limiting with short circuit protection. At 1800VA unit enters cycling (hiccup) mode. Thermal shutdown with automatic recovery in case of insufficient cooling.
Output Overvoltage Protection	264Vac by internal supply voltage limiting

Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458, EN 60950, EN 62368-1 and CE
EMI	EN 55032 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	3U5: 3U x 12" chassis mount assembly 432 x 132 x 355 mm (W x H x L) including connectors
Weight	10 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

