

FCTT3000R Series AC/AC 3-Phase to 3-Phase Frequency Converter



3U x 19" version



6U x 19" version



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

FCTT3000R Series

Description

The FCTT3000 Series is a rugged, modular AC/AC frequency converter system that uses microprocessor controlled, high frequency PWM technology to deliver 3-Phase, 3000VA continuous sine-wave output power from a 3-phase input.

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

The standard 3-phase outputs are 208V, 380V or 400V (L-L). The output neutrals are internally connected to the chassis in "Y" configuration, therefore the phase-to-neutral voltages (115V, 220V or 230V) are also available.

The mechanical size of the system depends on the input/output combination.

Full electronic protection eliminates the possibility of failure due to abnormal operating conditions, including application errors.

Low component count and the use of components with established reliability results in high MTBF.

Cooling is by built-in fans, which draw air into the unit.

The FCTT3000 is manufactured at our plant under strict quality control.

Customized versions are also available.

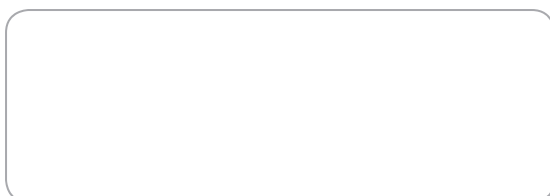
Features

- Input is filtered to EN 55022 Class A
- Sinusoidal wave shape
- Isolated, floating output
- 3000VA of output power
- Full electronic protection
- High reliability
- Telecom quality
- Field-proven design topology

Specifications (Specifications Subject to Change Without Notice)

Input Voltage	208Vac (L-L) +/-15% 3-phase 380V or 400Vac (L-L) +/-15% 3-phase 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	According to the corresponding input/output combination, as minimum: 2250Vdc input to chassis, 4300Vdc input to output, 8mm spacing, 1500Vdc output to chassis
Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
EMI	EN 55022 Class A Class B filtering available
Output Voltage	208Vac (L-L)/3-phase continuous at 60 or 400Hz or 380Vac or 400Vac (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: 115Vac, 220Vac or 230Vac) 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 80% 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. 80,000 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	Package varies from 3Ux19" to 6Ux19" depending on input/output configuration The 6U x 19" version is typically built with four 3U3 size modules Chassis-mount versions are available
Weight	3U x 19" version: 15kg, 6U x 19" version: 28 kg
Connections	Input / Output: Terminal block Interconnections: Terminal blocks
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



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The power conversion company

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