

# FCTT1500R Series AC/AC 3-Phase to 3-Phase Frequency Converter



3U7 Rack-mount



3U7 Chassis-mount



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

### FCTT1500R Series

#### Description

The FCTT1500 Series is a rugged, modular AC/AC frequency converter system that uses microprocessor controlled, high frequency PWM technology to deliver 3-Phase, 1500VA 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.

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 FCTT1500 is manufactured at our plant under strict quality control.

Customized versions are also available.

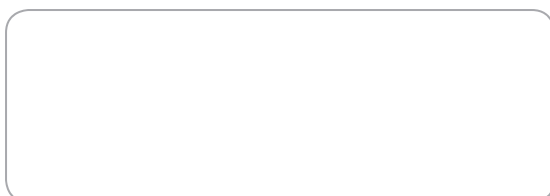
#### Features

- Input is filtered to EN 55022 Class A
- Sinusoidal wave shape
- Isolated, floating output
- 1500VA of output power
- Full electronic protection
- High reliability
- Telecom quality
- Field-proven design topology

# Specifications ( Specifications Subject to Change Without Notice)

<b>Input Voltage</b>	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
<b>Input Protection</b>	Inrush current limiting Varistors Internal safety fuse Lower voltage than specified input min. will not damage unit
<b>Isolation</b>	According to the corresponding input/output combination, as minimum: 2250Vdc input to chassis, 4300Vdc input to output, 8mm spacing 500Vdc output to chassis
<b>Standards</b>	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
<b>EMI</b>	EN 55022 Class A Class B filtering available
<b>Output Voltage</b>	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
<b>Wave Form</b>	Sinusoidal
<b>Total Harmonic Distortion</b>	Less than 5% at full load
<b>Line / Load Regulation</b>	Maximum $\pm 6\%$ from no load to full load.
<b>Load Crest Factor</b>	Maximum 2.5 at 90% load
<b>Output Noise</b>	High frequency ripple is better than 500mVrms (20MHz BW)
<b>Output Overload Protection</b>	Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient cooling
<b>Output Overvoltage Protection</b>	Output voltage is limited by internal supply voltage
<b>Efficiency</b>	Depends on input and output voltage combination. Typically 80% at full load
<b>Operating Temperature Range</b>	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
<b>Temperature Drift</b>	0.05% per °C over operating temperature range
<b>Cooling</b>	Built-in fan draws air into the unit
<b>Environmental Protection</b>	Basic ruggedizing Full ruggedizing and conformal coating as option
<b>Shock/Vibration</b>	IEC 61373 Cat 1 A&B
<b>Humidity</b>	5 - 95% non-condensing
<b>MTBF</b>	Min. 95,000 hours at 45°C, demonstrated MTBF is significantly higher Fan excluded
<b>Indicators</b>	None
<b>Control Input</b>	None Remote shutdown as option
<b>Alarm Output</b>	None Option: output fail alarm (Form C)
<b>Package / Dimensions</b>	19" rack-mount or chassis mount assembly. 3U x 19" (3U7) chassis: 132 x 483 x 407 mm including connectors
<b>Weight</b>	14kg
<b>Connections</b>	Input / Output: Terminal block
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	2 years

Available from:



## RIPEnergy®

The power conversion company

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