

# FCTS1500 Series AC/AC 3-Phase to 1-Phase Frequency Converter



Pure sinewave



3 - Phase input



High frequency technology



Light weight, compact size



Full electronic protection



Optional extended temperature range



Optional output fail alarm (Form C)

## Applications

- Aviation / Marine
- 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

### FCTS1500 Series

#### Description

The FCTS1500 AC/AC frequency converter provides 1-phase power from a 3-phase line outlet.

The standard unit delivers 1-phase outputs of 220VAC/400Hz.

The unit features full electronic protection, high efficiency and low input and output noise.

The cooling is provided by three built-in fans, allowing operation up to +50°C with no derating.

#### 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)

## Electrical (Input)

<b>Input Voltage VAC</b>	380Vac /50Hz three phase (4 wire) 196-264V range 47 – 63Hz 3.3A rms max per phase Consult factory for other inputs
<b>Input Protection</b>	Inrush current limiting Varistor Internal safety fuse Lower voltage than specified input min. will not damage unit
<b>Isolation</b>	Input to chassis: 2250Vdc Output neutral is connected to the chassis internally

## Electrical (Output)

<b>Output</b>	220Vac single phase / 6.8A rms continuous at 400Hz NOTE: Output neutral is internally connected to chassis, floating output is available. Consult factory for other voltages and frequencies
<b>Output Overload Protection</b>	Current limiting with short circuit protection. At 1800VA, unit enters cycling (hiccup) mode. Thermal shutdown with automatic recovery in case of insufficient cooling.
<b>Output Overvoltage Protection</b>	264Vac by internal supply voltage limiting
<b>Wave Form</b>	Sinusoidal

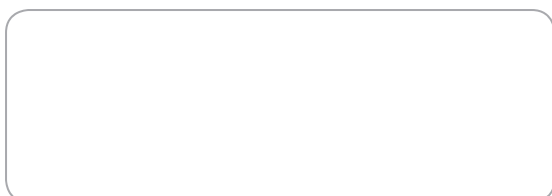
## Indications & Electrical

<b>Total Harmonic Distortion</b>	Less than 5% at full load
<b>Efficiency</b>	Min 80% 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 less than 500mVrms (20MHz BW)
<b>Operating Temperature Range</b>	0° - 50°C for full specification Extended range available
<b>Humidity</b>	5 - 95% non-condensing
<b>Temperature Drift (for output voltage level)</b>	0.05% per °C over operating temperature range
<b>EMI</b>	EN 55022 Class A as a minimum
<b>Cooling</b>	By built-in fans
<b>Environmental Protection</b>	Basic ruggedizing
<b>MTBF</b>	90,000 hours at 45° C
<b>Indicators</b>	None
<b>Control Input</b>	None
<b>Alarm Output</b>	None

## Mechanical Specifications

<b>Depth</b>	413 mm
<b>Width</b>	292 mm
<b>Height</b>	136 mm
<b>Weight</b>	10 kg
<b>Connections</b>	Input/output: terminal block
<b>RoHS Compliance</b>	Fully compliant
<b>Safety</b>	Designed to meet C22.2 No. 107.1 – 01, UL 458 and EN 60950
<b>Warranty</b>	1 year

Available from:



# RIPEnergy®

The power conversion company



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