

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



Benefits

- Ultra Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

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)

Input Voltage VAC	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 specified input min. will not damage unit
Isolation	Input to chassis: 2250Vdc Output neutral is connected to the chassis internally

Electrical (Output)

Output	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
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
Wave Form	Sinusoidal

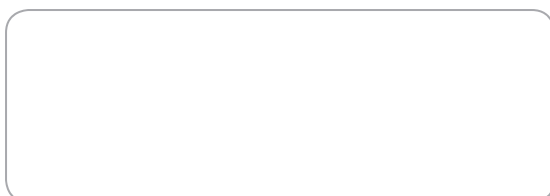
Indications & Electrical

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

Mechanical Specifications

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

Available from:



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The power conversion company

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