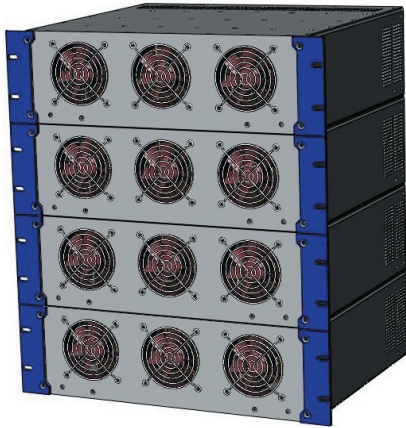


# FCSTrail9000 Series AC/AC Single-Phase to 3-Phase Frequency Converter



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

### FCSTrail9000 Series

#### Description

This rugged, AC/AC frequency converter uses field proven, microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage.

The unit is built with internal power modules; six input filters, nine modules convert the input voltage to an internal DC bus voltage, which feeds the six output modules.

The built-in fans provide sufficient airflow for operation without de-rating to the specified temperature.

The high frequency conversion enables a compact construction, low weight and high efficiency. The unit has full electronic protection.

The input and output are filtered for low noise. The use of components with established reliability results in high MTBF.

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

Special Features: 200AC input @ 16.66Hz, conformal coating and ruggedizing for rail application

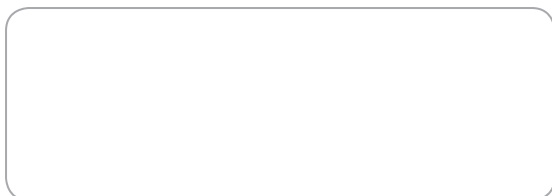
#### Features

- Input is filtered to EN 55022 Class A
- Sinusoidal wave shape
- Isolated, floating output
- 9000VA 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>	200Vac nominal, 16.7Hz 170-230Vac operating range Input current: 95A rms max total (32A rms per input module)
<b>Input Protection</b>	Inrush current limiting Varistor Internal safety fuse Lower voltage than specified input min. will not damage unit
<b>Isolation</b>	2250Vdc input to chassis 2250Vdc output to chassis Output neutrals are connected to the chassis
<b>Standards</b>	Designed to meet EN60950-1 and corresponding standards
<b>EMI</b>	EN 55022 Class A
<b>Output Voltage</b>	3-phase 400Vrms (L-L), 50Hz 7.5Arms per phase continuous, All neutrals are internally connected to chassis in "Y" configuration 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 10% load to full load.
<b>Load Crest Factor</b>	Maximum 2 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 airflow
<b>Output Overvoltage Protection</b>	440Vac by internal supply voltage limiting
<b>Efficiency</b>	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>	By built-in high-quality fans
<b>Environmental Protection</b>	Ruggedizing Conformal coating
<b>Shock/Vibration</b>	IEC 61373 Cat 1 A&B
<b>Humidity</b>	5 - 95% non-condensing
<b>MTBF</b>	Min. 70,000 hours at 45°C Fan excluded
<b>Indicators</b>	None
<b>Control Input</b>	None
<b>Alarm Output</b>	None Option: output fail alarm (Form C)
<b>Package / Dimensions</b>	Four 3U7: each module 132 x 483 x 407mm Chassis mount version
<b>Weight</b>	48 kg
<b>Connections</b>	Input: Threaded studs M8 Output: Terminal block Interconnections: Terminal block
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	2 years

Available from:



## RIPEnergy®

The power conversion company

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