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## APPLICATIONS

- Industrial Controls
- Telecom Power Plants
- Railway / Transportation
- Military Applications
- Marine
- Mining
- Oil Rigs
- Steel Mills
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power
- Manufacturing Location
- OEM Applications

## FEATURES

- Dual 120VAC sine wave output voltage
- Field-proven rugged design
- Cooling by internal fans
- Filtered input and output
- Full electronic protection
- Compact size
- 5000VA of output power

# FCSD5000-A/A2P-2X3U5-T7244 INDUSTRIAL FREQUENCY CONVERTER

## SERIES FCSD5000

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

The frequency converter is built with internal power modules. Six input modules convert the input voltage to internal DC voltages, which feeds two sets of two AC output modules (two per phase).

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. T

he 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



Pure  
Sinewave



Full electronic  
protection



High  
frequency  
technology



Light weight,  
compact size



Optional  
Output fail  
alarm  
(Form C)

# SPECIFICATIONS

Input Voltage	120Vac nominal, 47-63Hz 97-132Vac operating range Input current: 66Arms max.
Input Protection	Inrush current limiting Varistor Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
Isolation	2250Vdc input to chassis 2250Vdc input to output 2250Vdc output to chassis Output isolated from the chassis
Output Voltage	Dual 120Vac/60Hz/20.8Arms continuous per phase (240Vac L-L voltage) Output is isolated from chassis
Output 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	2 at 90% load
Output Ripple Noise	High frequency ripple is less than 500mVrms (20MHz BW)
Efficiency	80% at full load
Output Overload Protection	Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient cooling RCD breaker on the output
Output Overvoltage Protection	140Vac by internal supply voltage Limiting per phase

Standards	Designed to meet C22.2 No. 107.1 – 01, UL 458 and EN 60950-1, EN 62368-1, CE and related standards
EMI	EN55032 Class A as with margins
Operating Temperature	0°C to +50°C for full specification with proper installation
Humidity	5 - 95% non-condensing
Temperature Drift	0.05% per °C over operating temperature range
Cooling	By built-in high quality fans
Environmental Protection	Basic ruggedizing Conformal coating
Shock/Vibration	IEC 61373 Cat 1 A&B
Dimensions	Two 3U5: 305 x 132 x 407mm each Chassis mount
Weight	20 Kg
Connections	Input: Terminal block Output: Terminal block Interconnections: Cable with connector
MTBF	120,000 hours @ 45°C (Fans not included)
Indicators	None
Control Input	Not installed
Alarm output	None Optional output Fail Alarm (Form C)
RoHS Compliance	Fully compliant
Warranty	2 years

