



FCX
SYSTEMS

**Ground POWER Solutions
For All Generations Of Aircraft**

FCX Systems Inc., a worldwide leader in solid-state 400Hz technology since 1987, continues to provide customers with state-of-the-art technology to meet the changing needs of the marketplace.

FCX Engineers have designed an economical, compact 312KVA solid-state frequency converter intended for direct genset replacement or which might be utilized in compact settings. This high performance unit is indoor rated, constructed to operate under the most extreme situations. The unit requires minimal space while offering easy front and rear access to the unit for simple servicing. FCX has achieved high performance and increased reliability by using laminated bus integrated inverter modules. The performance characteristics are enhanced by micro-processor controllers with field programmable logic. This advanced design has long made the FCX converter the top converter in the world.

- Higher efficiency than rotating converters
- True RMS Design for precise voltage control of non-linear loads.
- Integrated IGBT driver/power modules providing the most compact and reliable inverter design
- Easy access for servicing
- Built-in Line Drop Compensation
- User-friendly controls
- RS485 is standard communication interface
- RS232 is optional upon request
- 300% overload capacity (optional)
- Clean, reliable power



UNIT PERFORMANCE

Voltage Regulation	+/- 1% Maximum
Voltage Recovery	Meets or exceeds limits of MIL-STD-704F, typically less than 50 milliseconds with a 100% load change
MTTR	Mean time to repair: less than 30 minutes

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INPUT POWER

Input Voltage	<ul style="list-style-type: none"> • 480VRMS+/- 10% 60Hz, 3 phase • 380VRMS+/- 10% 50Hz, 3 phase • 208VRMS+/- 10% 60Hz, 3 phase • Other voltages available
Input Frequency	45 to 65Hz
Input Phase Rotation	Any (automatic phase lock)
Inrush Current	None (soft start to rated power)
Protection	Overload, short circuit, over voltage, under voltage, phase loss, over temperature, access door interlock
Input Current Distortion	<10% at rated load

OUTPUT POWER

Output Power Rating	• 312KVA
Output Voltage	3 phase, 3 or 4 wire, ratings available from 575V
Voltage Regulation	+/- 1% Maximum
Output Frequency	400Hz, +/- 0.01%
Voltage Recovery	Meets or exceeds limits of MIL-STD-704F, typically less than 50 milliseconds with a 100% load change
Voltage Balance	+/- 1% for balanced loads, +/- 2% for 25% unbalanced loads
Harmonic Content	2% max., 1.5% typical (line to line, or line to neutral)
Overload Capacity	125% for one hour, 150% for 5 minutes, 200% for 20 seconds, 250% for 10 seconds
NBPT	Fully capable of No Break Power Transfer for all aircraft
Protection	Overload, short circuit, over and under voltage per MIL-STD-704F, over temperature, isolation, aircraft 28VDC interlock—immediate shutdown, access door interlock
Efficiency	92% load above 50% of rating
MTTR	Mean time to repair less than 30 minutes

DIMENSIONS

84"H (213 cm) x 126"W (320 cm) x 36"D (91 cm)

MONITORING AND CONTROLS

4 x 20 Character Backlit LCD Display
Frequency Operating Parameters & Diagnostics
16 Key Matrix Keypad for easy menu selection
Elapsed Time Meter
Emergency Stop

ENVIRONMENT

Enclosure	NEMA 12 equivalent
Audible Noise Level	Less than 72dba typical at 3 feet
Ambient Temp. Range	Operating -40°C to +55°C (-40°F to +131°F)
Humidity	0% to 100% with condensation
Altitude	0 to 3,000 meters (10,000 ft.) without derating
Wind	Up to 145 km/hr (90 mph)
Finish	Standard color: Ultra Sonic Chrome. Other colors available.

OPTIONS AND ACCESSORIES

Output Terminal Blocks, Circuit Breaker, or Contactor
Remote Boxes
Aircraft Cables
Distribution Panels
Line Drop Compensators
Gate Boxes
Paralleling Capabilities
Audible Alarm



FCX SYSTEMS

Engineered for Endurance

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