

60 KVA - 180 KVA



**FCX**  
SYSTEMS

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

Built-in Troubleshooting  
Guide In Display

Electronics Compartment  
Allows Calibration Without  
Arc Flash Gear

**FCXTREME**  
X60 | X90 | X120 | X180

**The FCXtreme Series provides reliable solid-state converters that are designed to provide aircraft ground power in “low profile” applications such as under passenger boarding bridges, in maintenance hangars, or on flight lines.**

All models optimized and tested to perform a continuous output power rating with 200% overload capacity in 24/7 operations.

- Individual phase regulation, improved efficiency, and lower input current distortion
- Innovative, adaptive wave optimization and voltage stabilization
- Laminated bus design eliminates transient voltage surges for high performance and increased reliability
- Lightweight powder-coated steel enclosure with sealed electronics compartment superior to typical aluminum enclosures to reduce RF emissions
- Full-featured user interface with detailed troubleshooting menus added to the advanced diagnostic and logging system
- High contrast LED display with 16-button keypad and separate standalone controls to ensure ease of use for most frequent functions
- Standard RS485 Modbus communication and integration capability with available RJ45 Ethernet and Wi-Fi connection capability

#### UNIT PERFORMANCE

Efficiency	93% or better at 100% load
NBPT	Fully capable of No Break Power Transfer for all aircraft
MTTR	Mean time to repair: less than 30 minutes
Operational Life	20 to 25 years
MTBF	Mean time between failure: 24,000 hours

#### Suitable For:

Fixed and Rotary Wing Aircraft and All Other  
400 Hz Applications



**Through an innovative design, advanced diagnostic and logging systems, and rugged modular construction, FCXtreme Series products assure maximum power availability and minimal maintenance time.**

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## INPUT POWER

Input Voltage	480VAC +/- 10% standard, other input voltages available
Input Frequency	60Hz +/- 1Hz standard, 50Hz optional
Input Phase Rotation	Any (automatic phase lock)
Inrush Current	None (soft start to rated power)
Protection	Overload, short circuit, over voltage, temperature, access door interlock
Input I <sub>THD</sub>	≤5% at rated load, ≤8% at any load

## OUTPUT POWER

Output Power Rating	60kVA/60kW continuous 90kVA/90kW continuous 120kVA/120kW continuous 180kVA/180kW continuous
Output Frequency	400Hz, +/- 0.01% for any load condition
Output Voltage	200V L-L / 115V L-N – adjustable +/- 10%
Voltage Regulation	+/- 1% Maximum
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	1.5% max., 1% typical (line to line or line to neutral)
Overload Capacity	125% for one hour, 150% for 5 minutes, 200% for 20 seconds
Protection	Overload, short circuit, over and under voltage per MIL-STD-704F, over temperature, isolation, aircraft 28VDC E/F interlock, access door interlock

## MONITORING AND CONTROLS

Display	4 x 20 character backlit display and dedicated indicator lights, with LED configuration for harsh environments
Control	16-key matrix keypad for full control and monitoring, as well as dedicated stand alone push button controls for Start, Stop/Reset, and Output On/Off control for user friendly operation
Metering	Full three-phase monitoring and display of input and output voltage, current, and frequency; built-in troubleshooting guide in display; dedicated elapsed time meter also provided

## ENVIRONMENTAL

Enclosure	NEMA 3R equivalent (IP22). Electronics area rated NEMA 4 (IP66)
Audible Noise Level	Less than 65dBA typical @ 1m
Ambient Temp. Range	Operating: -40 °C to +50 °C (-40 °F to +122 °F)
Humidity	0% to 100% without condensation
Altitude	0 to 3,000 meters (9,842 ft.) without derating
Wind	Up to 201 km/hr (125/ mph)

## MECHANICAL

Construction	Lightweight powder coated steel enclosure over durable steel frame with sealed electronics compartment
Size	508mm high x 1524mm wide x 1270mm deep (23" x 60" x 50")
Weight	60-90 Series: 725 kg (1,600 lbs) 120-180 Series: 943 kg (2,080 lbs)
Finish	Standard color: traffic white (RAL 9016) powder coat, other colors available

## CODES AND STANDARDS

Meets or Exceeds	MIL-STD-704F BS2G-219	SAE ARP-5015 DFS-400
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## OPTIONS AND ACCESSORIES

28.5VDC Output with 600A rating	Dual outputs
Wi-Fi communications integration	Bridge mounting brackets
Cable retriever or cable hoist	Pantograph cable delivery system
Towable 4-wheel trailer, with cable racks	Floor stand kit
Dual or single cable racks	Remote operators station(s)
Output power cables	Power usage monitoring
300% overload for 60/90 kVA units	



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SYSTEMS

*Engineered for Endurance*

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