

60 KVA - 180 KVA



*New X60 - X180 delivers improved performance in a package over 50% smaller than previous design.*



**FCX**  
SYSTEMS

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

**FCXtreme**  
X60 - X180

**The FCXtreme Series provides reliable solid-state converters that are designed to provide 400Hz ground power with a small footprint in applications such as inside aircraft hangars, in electrical equipment rooms, or in maintenance shops.**

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
28VDC Output	Available 600A rated 28VDC output with 400% surge rating
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:

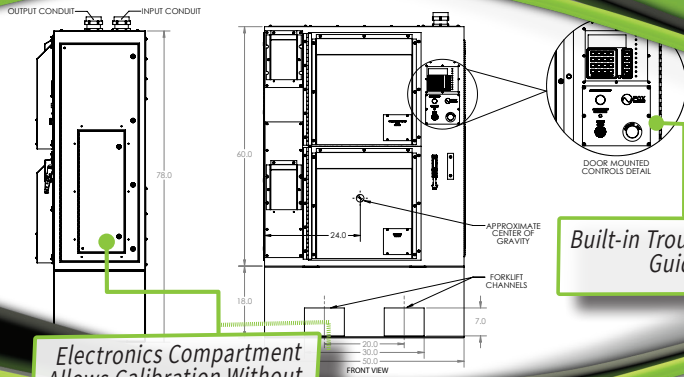
Fixed and Rotary Wing Aircraft and All Other  
400 Hz Applications



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

**www.fcxinc.com | 304.983.0400 | sales@fcxinc.com**

ISO 9001:2008



*Built-in Troubleshooting Guide in Display*

## 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 ITHD	≤5% at rated load, ≤8% at any load

## OUTPUT POWER

Output Power Rating	60kVA continuous 75kVA continuous 90kVA continuous 120kVA continuous	140kVA continuous 160kVA continuous 180kVA 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 & MECHANICAL

Enclosure	NEMA 4 (IP66) equivalent rated steel enclosure with durable powder coat finish. Standard color: RAL9006 "White Aluminum" (gray), other colors available.
Size/Weight	1981mm high x 1270mm wide x 706mm deep (78"H x 50"W x 27.8"D)
Ambient Temp. Range	Operating: -40 °C to +50 °C (-40 °F to +122 °F)
Humidity	0 - 100%, non-condensing
Audible Noise Level	Less than 68dba typical @ 1m

## CODES AND STANDARDS

Meets or Exceeds	UFGS 26 35 43 MIL-STD-704F BS2G-219	NFPA 70 SAE ARP-5015 DFS-400
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## OPTIONS AND ACCESSORIES

28.5VDC Output with 600A rating	Wi-Fi communications integration
Integral single cable rack	Remote operators station(s)
Freestanding or wall mount cable racks	Output power cables
Output circuit breaker for distributed power applications	Power usage monitoring
Dual or Triple output contactors	300% overload for 60/90 kVA units
Unity power factor rating	

## SERVICE AND SUPPORT

At FCX Systems, we take pride in our highly trained support staff, dedicated to providing the best operational and technical support in the industry. Factory technicians are available for on-site training, maintenance and repair services, either in conjunction with our available maintenance plans, or as standalone services. Operational and maintenance training are also available at our factory. With FCX you can rest assured that you will have the support you need, when you need it, from a friendly, professional and experienced staff, 24/7/365.



**FCX**  
SYSTEMS

*Engineered for Endurance*

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