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

<table>
<thead>
<tr>
<th>Metric</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>93% or better at 100% load</td>
</tr>
<tr>
<td>28VDC Output</td>
<td>Available 600A rated 28VDC output with 400% surge rating</td>
</tr>
<tr>
<td>MTTR</td>
<td>Mean time to repair: less than 30 minutes</td>
</tr>
<tr>
<td>Operational Life</td>
<td>20 to 25 years</td>
</tr>
<tr>
<td>MTBF</td>
<td>Mean time between failure: 24,000 hours</td>
</tr>
</tbody>
</table>

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.
**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 THD**: 
  - Input: <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, 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
- SAE ARP-5015
- BS2G-219
- DFS-400

**OPTIONS AND ACCESSORIES**

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

**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.