PRECISION FREQUENCY CONVERTER Model PFC036 - 45KVA



Ground POWER Solutions For All Generations Of Aircraft

The FCXtreme Series Model PFC036 provides FCX Systems' rugged and reliable performance in a rating ideally suited for point of use applications. Its small footprint and low profile provide for easy integration into the hangar, flight line, or other environment.

All models engineered, optimized and tested for true continuous output power rating with 200% overload capacity - for reliable, dependable performance 24/7/365.

- Innovative, adaptive wave optimization and voltage stabilization for low input THD and precise performance without the efficiency penalty of less advanced designs
- 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 both emissions of, and susceptibility to, RFI and EMI
- 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 200A 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

a statilitada di dalla tanata historia.

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

SPECIFICATIONS





ar now and mer manushance

INPUT POWER

Input Voltage	480VAC +/- 10% standard, other input voltages available	
Input Frequency	60Hz +/- 10% standard, 50Hz optional	
Input Phase Rotation	ation 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 (when input frequency is +/- 1 Hz from nominal)	

OUTPUT POWER

Output Power Rating	45kVA continuous Can be used for any 400hz application ≤ 45kVA	
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

4 x 20 character backlit display and dedicated indicator lights, with LED configuration for harsh environments
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
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 12 equivalent rated steel enclosure with durable powder coat finish. Standard colors: RAL9006 "White Aluminum" (gray) or RAL9016 "Traffic White". NEMA 4 equivalent rating is optional.
Size/Weight	52"H x 48"W x 25"D (56"W with NEMA 4 vent hoods) – 1,200 lbs. est.
Ambient Temp. Range	Operating: -40 $^{\circ}$ C to +50 $^{\circ}$ C (-40 $^{\circ}$ F to +122 $^{\circ}$ F)
Humidity	0 - 100%, non-condensing
Audible Noise Level	Less than 68dbA typical @ 1m

CODES AND STANDARDS

UFGS 26 35 43	NFPA 70	
MIL-STD-704F	SAE ARP-5015	
BS2G-219	DFS-400	
	MIL-STD-704F	MIL-STD-704F SAE ARP-5015

OPTIONS AND ACCESSORIES

28.5VDC Output with 200A rating	Output power cables
Integral single or dual cable racks	Power usage monitoring
Freestanding or wall mount cable racks Wi-Fi communications integration	Floor Stands – 18 and 24 inch height
Remote operators station(s)	Mobile caster mounted configuration

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. Contact us at (304)983-0406 or service@fcxinc.com.



WWW.fcxinc.com | 304.983.0400 400 FCX Lane | Morgantown, WV 26501 sales@fcxinc.com