



FCX 270VDC powers every assembly station around the world for the F-35 Lightning II. FCX Precision 270VDC - PROVEN TO PERFORM.



FCX
SYSTEMS

The preferred and best
power of choice for all
270VDC applications.

No other 270VDC power supply in the world is more proven or preferred than the FCX Precision DC unit. This reliable, high performance unit is the product of many years of support to F-22 and now F-35 test and production – and is absolutely the best choice for any 270VDC requirement.

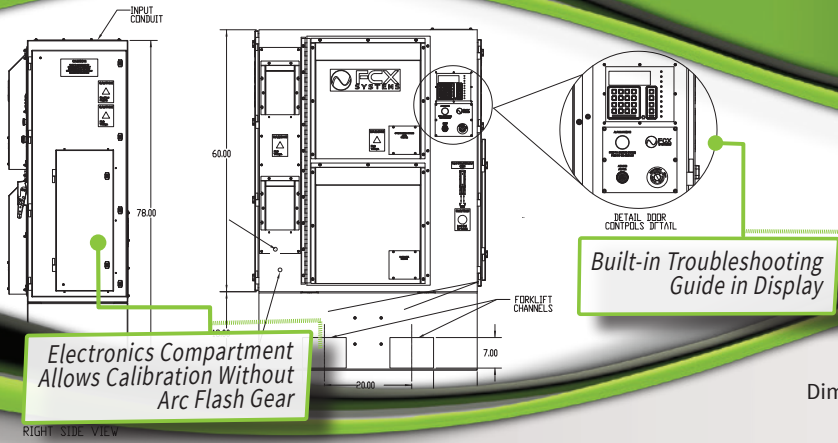
- The advanced design of the FCX 270VDC power supply delivers precise regulation and high dynamic response
- Meets or exceeds the most stringent requirements for 270VDC power, including Lockheed Martin's F-35 Ground Electrical Power Interface Specification
- Innovative, adaptive wave optimization and voltage stabilization for exceptionally "clean" power
- Laminated bus design eliminates transient voltage surges for high performance and increased reliability
- All models optimized and tested to perform from light loads to continuous full power rating, with robust overload capability, to handle the demands of 24/7/365 operations
- Advanced BITE - diagnostic and logging system with on board troubleshooting menu
- High contrast LED display with full feature user interface and 16-button keypad. Separate standalone controls to ensure ease of use for most frequent functions
- Standard RS485 Modbus communication
- Thermally controlled cooling fans designed to run only when necessary for increased efficiency

*New 72kW rated
270VDC Precision
Power Supply Model
VDC270-72kW is shown
here in vertical fixed
mount configuration.
We offer a wide
variety of unit ratings
and configurations -
standard and custom.
Please contact
us anytime at
sales@fcxinc.com with
your requirements.*



**"It was a pleasure testing a product
that easily met or exceeded all
requirements and expectations."**

*- Lockheed Martin F-22 Ground Power
Qualification Test Manager*



Specifications below based on 72kW-267A rated model VDC270-72kW. Other ratings and types available. Please contact us for information.

INPUT POWER

Input Voltage (+/-10%)	380 - 480VAC
Input Frequency (+/- 1Hz)	50-60Hz
Input Phase	3ph, 4 Wire
Input Current	480VAC, 3ph, 60Hz Input Current: 95A @ 100% / 238A @ 250% Overload 380VAC, 3ph, 50Hz Input Current: 118A @ 100% / 295A @ 250% Overload
Input Current Distortion (%I _{THD})	≤8% @ 100%
Input Inrush Current	None (Soft start to rated power)
Input Power Factor	≥0.95 @ 50% to 100% Load
Input Phase Rotation	Any
Efficiency	480VAC, 3ph, 60Hz Efficiency: ≥92% @ 50% Load, ≥94% @ 100% Load 380VAC, 3ph, 50Hz Efficiency: ≥92% @ 50% Load, ≥94% @ 100% Load
Protection	Overload, Short Circuit, Output Over/Under Voltage, Phase Loss, Access Door Interlock, & Over-Temperature

OUTPUT POWER

DC Output #1A Voltage (+/-1%)	270VDC
DC Output #1B Voltage (+/-1%)	28VDC
DC Output #1A Current	267A
DC Output #1B Current	15A
Output Configuration	2 Wire
Output Overload	125% to 250% (Adjustable)
Output Voltage Adjust	+/-10% of Nominal Voltage
Line Drop Compensation	0-5%
Output Voltage Ripple	< 3 Volt Peak to Peak (100% Load)
Protection	Overload, Short Circuit, Over/Under Voltage, Overload, & Over-Temperature

ENVIRONMENTAL & MECHANICAL

Enclosure	NEMA 4 equivalent (IP66) steel enclosure with durable powder coat finish. Standard color: RAL9006 "White Aluminum" (gray), other colors available. Integral 18 inch floor stand for compliance to NFPA 70 Article 500 Class 1 Div. 2 requirements.
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Dimensions / Weight

1981mm high x 1270mm wide x 711mm deep (78"H x 50"W x 28"D) / 789 kg (2,040 lbs)

Operating Temperature Range	-40°C to 55°C / -40°F to 131°F
Storage Temperature Range	-40°C to 71°C / -40°F to 160°F
Humidity	0% to 100% without condensation
Audible Noise	≤68dB @ 10ft / 3m

MONITORING AND CONTROLS

Display	4 line x 20 character LED display. Dedicated LED indicators for Power On, DC Buss Charged/270VDC Supply On, Interlock Supply On, 270VDC-267A On, 270V-267A Interlock On, Module Fault, Summary Fault
Control	16 key matrix keypad for full control and menu navigation. Dedicated push button controls for Start-Stop/Reset and Output On/Off.
Monitoring	Full three-phase monitoring and display of input voltage and current, as well as DC output voltage and current, and DC buss voltage.

CODES AND STANDARDS

Meet or Exceeds	MIL-STD-704F NFPA 70 (NEC) UFGS 26 35 44 Lockheed Martin F-35 Ground Electrical Power Interface Specification (Document No. 2ZEU00004, Rev-0007) ISO 9001:2008 (Quality) CE Certification to 2014/35/EU, 2014/30/EU - EN 61010-1:2010, ENISO 12100:2010, EN 61000-6-2:2005, & EN 55011: 2009+A1
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OPTIONS AND ACCESSORIES

270VDC Low Inductance Output Cables	30A Auxiliary 270VDC Output
Custom Power Ratings	Remote Operator Stations: Push Button or Full Function LED Display
Mobile (trailer mount) Unit Configuration	Integral Cable Rack
Low Profile Flight Line Unit Configuration	
400Hz Input Power Option	



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Engineered for Endurance

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