PXE SERIES - 30kVA ~ 450kVA





For Applications

Airline

- Airport
- Laboratory and test
- Aviation and avionics

Main Features

- 9 Large power rating, up to 450kVA
- Perfect over load ability up to 400%
- Low harmonic distortion
- Automatically voltage compensation system ideal voltage at aircraft connector

ELECTRONICS

- Self diagnose system which would show error code on the LCD screen
- Compact unit, light weight, high efficiency and low noise
- New 12-pulse rectifying technology, input current distortion <8.5%, input power factor>0.96

PX-FCA SERIES

30kVA ~ 450kVA

SOLID STATE FREQUENCY CONVERTER. GPU



PX ELECTRONICS POWER SOLUTION EXPERT

SINCE 2008, We have been committed to providing excellent power products and solutions to customers around the world.

WORKING ENVIRONMENT

It can work normally in the temperature range of -40 $^{\circ}\text{C}$ \sim +60 $^{\circ}\text{C}$, and the protection grade reaches IP55, which fully meets the needs of Outdoor Use

PX-FCA SERIES

PX Electronics PXFCA series solid state frequency converter/GPU is designed to change the power at 50hz or 60hz to aircraft quality power at 400hz for start-up, inspection and maintenance of civil aircraft, military aircraft and onboard equipment.

HIGH-PERFORMANCE FPGA PROCESSOR

Realize pure digital control and new twelve-pulse rectifying technology, low harmonic content, fast response, high power factor, high efficiency of the whole machine, low pollution to the power grid, and high reliability.

Centralized power supply system

Mains Parallel expansion to gain greater power Voltage drop GPU-1 compensators · · Distribution cabinet + voltage drop compensator + accessories Parallel Distribution Cabinet Used in maintenance hangars, airport Voltage drop aprons. compensator

Intelligent configuration strategy, automatically start and stop the GPU.



SOLID STATE FREQUENCY CONVERTER.GPU

PX-FCA SERIES - 30kVA ~ 450kVA

TECHNICAL SPECIFICATION

CAPACITY (kVA)	30	45	60	90	120	150	180	270	450
Input									
Three phase (Select One Individual Voltage)	3 x230V/400V±15%,3 x127V/220V±15%(Option)								
Frequency	50Hz ±5%,60Hz ±5%								
Power factor	≥ 0.95 (Full load)								
Total Harmonic Distortion	<8.5%								
Inrush Current	None, soft start								
Output									
Three phase	3×115/200V(L-N/L-L) ±1%,Adjustable Range: 100.V~130.V								
Frequency	400Hz ±0.1%								
Power Factor	(lagging) 0.7 ~ (leading) 0.95								
Phase Angle Symmetry	120°±1°(Balance Load)								
	120°±2°(30% Unbalance Load)								
Circuit Type	IGBT/PWM								
Total harmonic distortion	THD \leq 3% @ linear load, pure sine wave output								
Crest	1.41 ± 3% (±0.042)								
Overload	125% 600s,150% 60s,200% 30s,300% 10s,400% 1s								
Protection	Input under/over voltage,input phase sequence,overheat, Output under/over voltage (MH/T6018 standard),overload,short circuit								
Enclosure IP	IP55								
LCD display	Output voltage,Current,Frequency,Accumulated,Running time								
Working condition									
Temperature	Operation: -40°℃~60°℃								
Humidity	10~90% non-condensing								

Reliability and Efficiency						
Mean Time Between Failure (MTBF)	Invention Part: > 25000 hours					
	Ventilation Part: > 100000 hours					
Mean Time To Restore	< 30 min (MTTR)					
Service Life	More than 25 years					
Overall efficiency	≥ 90%					
Standby power consumption	<65W(Exhaust fans stop)					
Available Options	28 VDC, 600-800 A (45-180KVA only) Terminal extension for 2 PCS of 7 core cable 28V Military Interlock					
Dimension(W*D*H) for 30kVA~90kVA units	Fixed mounted:540*626*1215mm					
	Trailer type 1980*1090*1385mm					
	Bridge mounted 1215*625*540mm					
Dimension(W*D*H) for 120kVA~180kVA units	Fixed mounted:720*1100*1720mm					
	Trailer type 1400*2760*1400mm					
	Bridge mounted 1570*1030*665mm					
Standards	DFS400: Specification for 400 Hz aircraft power					
	ISO 6858: Aircraft ground support electric supplies					
	MIL-STD-704F: Aircraft electric power characteristics					
	MH/T6018 Aircraft ground solid state power unit					
	EN61000-6-4 Electromagnectic compatibility generic emission					
	EN61000-6-2 Electromagnectic compatibility generic immunity					