

Athena

www.athenaups.com



ATHENA STATIC FREQUENCY CONVERTER 10KVA~1000KVA*

*Can go up to maximum 2000KVA if connected in parallel
50Hz, 60Hz, 400Hz, or Any Fixed Frequency
Any Requested Voltage System

● The Experts' First Choice

FEATURES OF ATHENA STATIC FREQUENCY CONVERTERS

TRUE GALVANIC ISOLATION

DESIGN ensures that the AC output is isolated from the input under all modes of operation. Using an isolation transformer placed at the output can solve poor input grounding and ground leakage current, can be tied to any potential provided on site, and can attenuate noise.

PROTECTION AGAINST MISUSE

Athena SFC's friendly design, different from the strict operation procedures of other brands, prevents any damage from operational mistakes.

PLUG AND PLAY MODULAR DESIGN

OPERATING ENVIRONMENT

The SFC can accommodate extreme environments (temperature, humidity, altitude, shock, or contamination).

REDUNDANT POWER SUPPLY

If batteries are equipped, then no matter what happens to the utility power, there will be AC output.

ACCEPTS WIDE INPUT RANGE

The SFC can work effectively under an unstable AC source.

RUGGEDNESS

Sturdy and strong cabinet construction.

COLD START FUNCTION

The SFC can be cold started without an AC source (if with optional battery), which can provide emergency power.

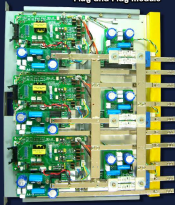
INTELLIGENT FAN SPEED CONTROL

increases the fan life expectancy and reduces audible noise by reducing fan speed under light load.

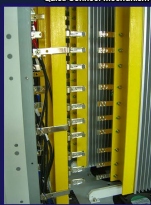
ADVANCED TECHNOLOGY

Utilize DSP, IGBT and static switching technology to increase the reliability and efficiency of the SFC.

Plug and Play Module



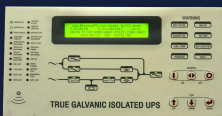
Quick Connect Mechanism



Plug and Play Module in Place



INTELLIGENT CONTROL PANEL WITH LED WARNINGS



The friendly user interface makes the SFC easy to use.

MULTI-CPU DESIGN AND SOFTWARE/HARDWARE COOPERATE CONTROL

make the system extremely reliable and easy for customization and modification to suit particular application requirements.

INDIVIDUALLY CONTROLLED INVERTER FOR EACH PHASE

prevents characteristics from being affected even under 100% unbalance load.

INTELLIGENT CHARGER WITH HUGE CHARGING POWER (OPTIONAL)

prolongs battery life expectancy. By providing a large charging power (selectable), the SFC can charge battery banks that provide up to 8 hours of back-up time without adding an extra charger.

REASONABLE HEAT DISSIPATION PASSAGE DESIGN

Because the control circuitry and power circuitry are physically separated, the SFC system can operate under harsh environments.

PROTECTION AGAINST DETACHING AND FLOATING OF THE NEUTRAL INPUT POWER SUPPLY

ensures the safety and stability of the SFC power output.

INTELLIGENT AND SAFE BATTERY TEST (OPTIONAL)

tests the battery without risk of output AC failure in case of dead battery.

12-PULSE FULL CONTROLLED RECTIFIER (OPTIONAL)

reduces the total harmonic distortion at the input.

N+1 PARALLEL OPERATION (OPTIONAL)

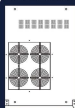
- No adjustments necessary on the site.
- No extra parallel cabinet needed.
- Higher endurance for dynamic input voltage and frequency.

INPUT HARMONIC FILTER (OPTIONAL)

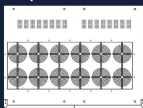
reduces T.H.D. (Total Harmonic Distortion) of input current.

DIMENSIONS OF SFC CABINETS

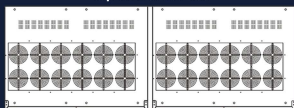
10KVA-60KVA
Top View with Fans



80KVA-160KVA
Top View with Fans



240KVA-320KVA
Top View with Fans

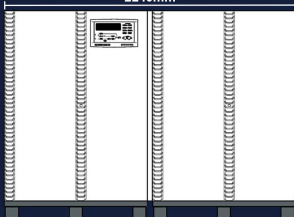
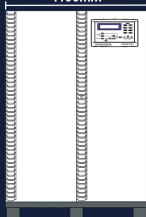


550mm

800mm

1100mm

2240mm



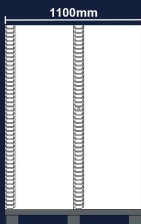
Front View

Side View

Front View

Front View

OPTIONAL BATTERY CABINETS FOR SFC



Front View

Side View

Front View

Side View

BATTERY CABINET DESIGN

The battery cabinet is designed with the same size and outline as the SFC to ease installation when several SFC and battery cabinets are aligned together. It can accommodate maintenance-free Lead Acid batteries and other types of batteries.

550 (W) x 1600 (H) x 800 (D) mm cabinet: 12V 26Ah x 29 pcs, or 12V 26Ah x 58 pcs (2 strings)
1100 (W) x 1600 (H) x 800 (D) mm cabinet: 12V 75Ah x 29 pcs, or 12V 88Ah x 29 pcs, or 12V 100 Ah x 29 pcs

WEIGHT OF CABINETS WITH BATTERIES INSTALLED

12V 26Ah x 29 pcs x 1 string is about 360 kgs.
12V 26Ah x 29 pcs x 2 strings are about 620 kgs.

12V 75Ah x 29 pcs x 1 string is about 1 075 kgs.
12V 88Ah x 20 pcs x 1 string is about 1 185 kgs.
12V 100Ah x 29 pcs x 1 string is about 1 325 kgs.

PERIPHERAL OPTIONS FOR ATHENA SFC

UPSCAN



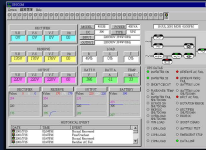
A remote control panel with LCD screen and LEDs. This handheld display can monitor 1-99 SFCs with RS-485 connected in series from as far as 1 000 meters from SFC.

3 PHASE SNMP CARD



can monitor and manage the SFC through a web browser and Java applet, providing three phase data acquisition in real time.

UPSCOM



can provide real-time three phases information of SFC connected on the line and monitor several SFCs with one PC.

EMERGENCY POWER OFF



can be installed locally or remotely from the SFC for stopping the SFC output in the case of an emergency.

MODBUS INTERFACE is available upon request for industrial automation control.

MECHANICAL OPTIONS FOR ATHENA SFC

TOP CABLE ENTRY



A rear panel extension can be added to the SFC to allow top and/or bottom cable entry into the unit. Standard unit comes with bottom cable entry.

SEISMIC TIE-DOWN ANCHOR



Anchors on both sides

Anchors the SFC to the mounting surface so that in the case of an earthquake, the unit will not slide across the floor or be knocked over.

Tie-down anchor is available for standard chassis with legs or with casters.

SHOCK AND VIBRATION ABSORPTION



DRIP SHIELDING PAN



CASTERS



For temporary movement across the floor to the final installation location.

ENCLOSURE BOTTOM SKIRTING



Closes off the base.

APPLICATIONS FOR CRITICAL POWER REQUIREMENTS

MEDICAL IMAGING SYSTEMS



X-Rays, CT Scans, MRI Scans, TomoTherapy, Cath Labs

OFF-SHORE OIL DRILLING



RAILROADS & TRANSPORTATION



25 Hz, 91.66 Hz, 100 Hz

SHIPBOARD AND SHORE POWER



INDUSTRIAL PROCESS & CONTROL



TELECOMMUNICATION



Supplying power to ships from the shoreline
Powering ship building yards

AVIATION POWER



WEAPON CONTROL



MILITARY & DEFENSE



Aviation Ground Support Units; 400 Hz

400 Hz Power

400 Hz Power