

GFC SERIES FlatPak™ 400 Hz FREQUENCY CONVERTER 75 kVA to 125 kVA



FIXED CONFIGURATION

STANDARD FEATURES:

- MIL-STD-704E, ARP 5015, DFS 400 and ISO 6858 Compliant
- Indoor/Outdoor Use
- Automatic Input Line Monitoring
- Automatic Line Drop Compensation (ALDC)
- Emergency Mushroom "OFF" Switch
- Input Safety Disconnect
- Built-in Maintenance Diagnostics
- Analog Control Panel
- Output Voltage and Amp Meter
- Internal Elapsed Time Meter
- Front Panel Summary Fault Indicators
- Lockable Controls and Entry
- Lifting Eyes and Forklift Channels

ISO 9001



Registered to ISO 9001:2000

APPLICATION:

Since its beginning in 1960, Unitron has specialized in the design and development of reliable, solid-state power systems. Through an innovative design, advanced self-diagnostic systems (BITE) and modular construction, Unitron products assure maximum power availability and minimal repair time.

The FlatPak™ Series includes 400 Hz converters specifically designed for installation where space is limited. The units mount "flat" against a wall, and offer the smallest size to power rating ratio in the industry. Also, by using noise reduction technology, Unitron converters are quiet enough to be located close to the equipment they serve. No special soundproofing or other insulation is required.

Output power ratings for the **400 Hz FlatPak Converter** range from 15 kVA to 400 kVA. In addition to fixed units, Unitron offers 400 Hz, 28 VDC and combination AC/DC converters in mobile and towable configurations.

OPTIONS:

- Alternate Input Voltages Available (specify)
- Alternate Output Voltages Available (specify)
- Input/Output Contactor
- Front Panel AC Voltage Adjust ($\pm 15\%$)
- Front Panel Frequency Adjust ($\pm 10\%$)
- No Break Power Transfer (NBPT) Compatible
- Low Input Current Distortion (12-pulse) of 10% max
- Remote Monitoring and Control
- Auto Restart
- Parallel 2 or more Units
- Up to 500% Overload (dependent on rating)
- Advanced Integrated Digital (AID™) Control Console
- Alternate Mounting Configurations Available
- Privacy Panel (covers floor mounting hardware)

GENERAL SPECIFICATIONS

INPUT:

Voltage* 480 volts, +10%, -15%, 3Ø, 3 wire plus ground
 Frequency 45 Hz - 66 Hz
 Phase Rotation Any
 Protection Over/undervoltage, loss of phase, overcurrent, and short circuit
 Inrush Current No greater than 100% of full load current

MECHANICAL:

Size:

RATING	OPTIONS	SIZE
75 kVA	All options available	See Figure A
90 kVA	All options available	See Figure A
125 kVA	All options available	See Figure A

Weight: 75 kVA = 1475 lbs. (669 kgs.)
 (may vary depending upon options selected) 90 kVA = 1680 lbs. (762 kgs.)
 125 kVA = 1925 lbs. (873 kgs.)

Construction: Indoor/outdoor - as defined for NEMA 250, type 4 environment

Cooling: Forced convection

Connection: Hardwire terminals

ENVIRONMENTAL:

Acoustical Noise 70 dBA maximum at 5 feet
 Temperature Range -40°C to +55°C

OUTPUT:

Power Rating 75 to 125 kVA (specify)
 Overload 110% for 60 min.
 125% for 10 min.
 150% for 2 min.
 200% for 20 sec.

Voltage* 115/200 volts, 3Ø, 4 wire, grounded neutral

Voltage Regulation ± 1.0% under all conditions of line, load and temperature

Voltage Transients IAW MIL-STD-704E

Frequency Regulation 400 Hz ± 0.01% under all conditions of line, load and temperature

Frequency Transients None

Phase Angle Regulation ± 2° for balanced loads

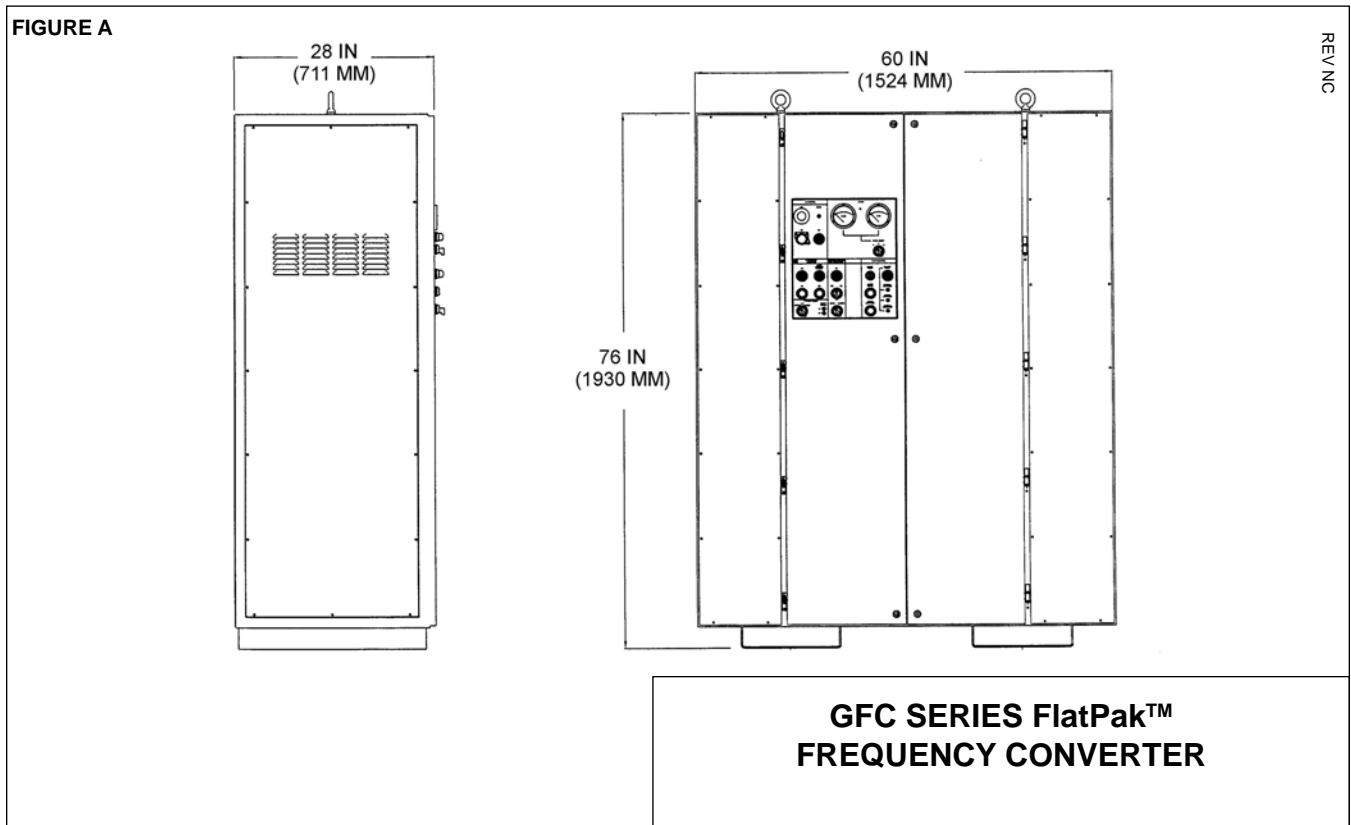
Harmonic Distortion 2.0% maximum

Protection Overload, short circuit, over/undervoltage and over/under frequency

ENERGY FACTORS:

Efficiency 95% typical at full load, 93% typical at half load; varies depending on configuration and rating

*Alternate Voltages Available (specify)



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