

## GFC SERIES FlatPak™ 400 Hz FREQUENCY CONVERTER 15 kVA to 60 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
- 18-Inch Hazard Area Clearance
- Automatic Aircraft 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 installations 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)
- Input Frequency 50 Hz
- AC Output Power Cable with Plug (available in 30 or 60 foot lengths)
- Aircraft Safety Interlock 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)
- Remote Monitoring and Control
- Auto Restart
- Parallel 2 or more Units
- Alternate Output Voltages
- Up to 500% Overload (dependent on rating)
- Advanced Integrated Digital (AID™) Control Console
- Alternate Mounting Configurations Available

**GENERAL SPECIFICATIONS**

**INPUT:**

Voltage 480 volts, +10%, -15%, 3Ø, 3 wire plus ground  
 Frequency 60 Hz ± 10%  
 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
15.0 kVA	All options available	See Figure A
25.0 kVA	All options available	See Figure A
37.5 kVA	All options available	See Figure A
60.0 kVA	Excludes options T-1, T-2, T-3, and I-3 in combination	See Figure A

Weight: 15.0 kVA = 575 lbs. (261 kgs.)  
 25.0 kVA = 650 lbs. (295 kgs.)  
 37.5 kVA = 725 lbs. (329 kgs.)  
 60.0 kVA = 1000 lbs. (454 kgs.)

Construction: Indoor/outdoor  
 Cooling: Forced convection  
 Connection: Hardwire terminals

**ENVIRONMENTAL:**

Acoustical Noise 65 dBA maximum at 5 feet  
 Temperature Range -40°C to +55°C

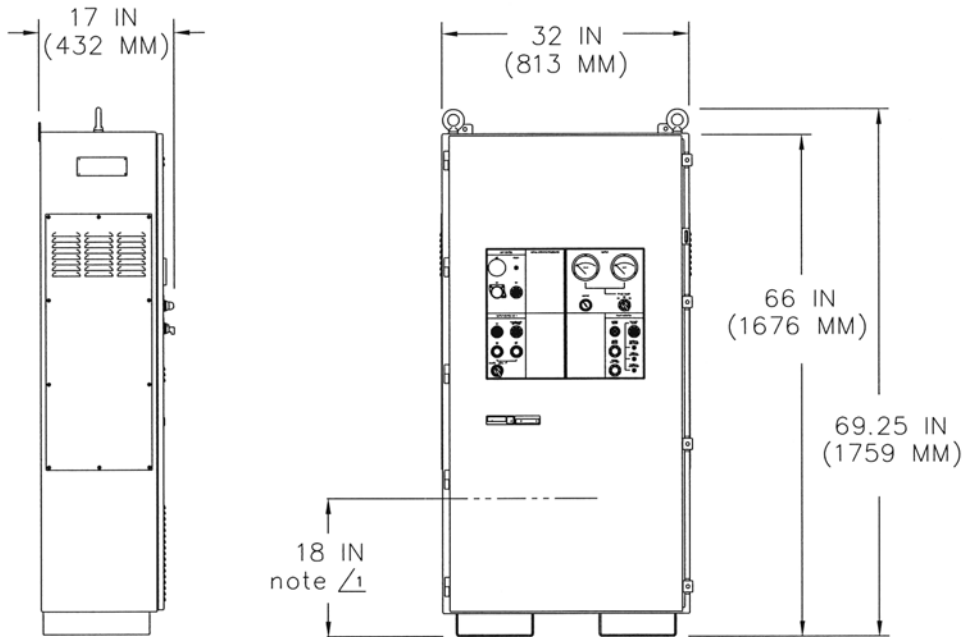
**OUTPUT:**

Power Rating 15 to 60 kVA (specify)  
 Overload 150% for 5 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  
 Energy Efficiency Ratio 20.0 typical

FIGURE 1



REV. NC

∠1 Safety clearance IAW Article 513-10(a) of the National Electrical Code (NEC)-Reference NFPA 70-1996

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 FREQUENCY CONVERTER**