

GFC SERIES FlatPak™ 400 Hz FREQUENCY CONVERTER 200 kVA



FIXED CONFIGURATION

STANDARD FEATURES:

- MIL-STD-704E, ARP 5015, DFS 400 and ISO 6858 Compliant
- Indoor/Outdoor Use
- Automatic Line Drop Compensation (ALDC)
- Low Input Current Distortion (12-pulse) of 10% max
- 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
- Forklift Channels

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)
- Input/Output Contactor
- Front Panel AC Voltage Adjust ($\pm 15\%$)
- Front Panel Frequency Adjust ($\pm 10\%$)
- Remote Monitoring and Control
- Communications Data Link Package (contact factory for details)
- Auto Restart
- Parallelable, N+1, Hot Swap (contact factory for details)
- Up to 380% Overload (depending upon rating in FlatPak™)

ISO 9001



Registered to ISO 9001:2000

GENERAL SPECIFICATIONS

INPUT:

Voltage*	480 volts, +10%, -15%, 3Ø, 3 or 4 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:	See Figure A
Weight:	200 kVA = 1963 lbs. (891 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	200 kVA
Overload	110% for 60 min. 125% for 10 min. 150% for 2 min. 200% for 20 sec. 250% for 6 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-704F
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
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NOTE:
*200 kVA units may be equipped with an alternate input voltage of 380, 415,
440 and 575 VAC.

