

GFC SERIES Low ProFile™ 400 Hz GROUND POWER UNIT 60 kVA to 90 kVA



HORIZONTAL CONFIGURATION

STANDARD FEATURES:

- MIL-STD-704E, ARP 5015, DFS 400 and ISO 6858 Compliant
- ETL Listed to ANSI/ UL Standard 1012
- Indoor/Outdoor (Hangar/Ramp) Use
- Automatic Input Line Monitoring
- Automatic Line Drop Compensation (ALDC)
- Emergency Mushroom "OFF" Switch
- Built-in Maintenance Diagnostics
- Analog Control Panel
- Output Voltage and Current Monitoring
- Internal Elapsed Time Meter
- Front Panel Summary Fault Indicators

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 Low ProFile™ Series includes 400 Hz converters designed to provide aircraft ground power in "low profile" applications, such as under passenger boarding bridges, in maintenance hangars, or on flight lines. This versatile design is particularly well suited for field installations where low clearances for aircraft are required.

Output power ratings for the **400 Hz Horizontal Low ProFile™ GPU** range from 15 kVA to 90 kVA. Larger power ratings are available upon request. Where ramp or floor space is a premium, the Low ProFile GPU can be installed as an overhead mounted unit.

In addition to fixed GPUs, Unitron offers 400 Hz, 28 VDC and combination AC/DC units 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)
- Output Cable Racks
- 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)
- Single Output with Safety Disconnect
- Dual Output with Individual Safety Disconnect
- 28 VDC Output
- Up to 500% Overload (dependent on rating)
- 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:	See Figure 1
Weight:	60.0 kVA = 750 lbs. (340 kgs.)
(may vary depending upon options selected)	75.0 kVA = 820 lbs. (372 kgs.)
	90.0 kVA = 875 lbs. (398 kgs.)
Construction:	Indoor/outdoor
Cooling:	Forced convection

ENVIRONMENTAL:

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

OUTPUT:

Power Rating	60 to 90 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 safety disconnect

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

