

GFC SERIES Low ProFile™ 400 Hz GROUND POWER UNIT 120 kVA to 180 kVA



BOARDING BRIDGE MOUNTED CONFIGURATION
(One of two modules shown above)

STANDARD FEATURES:

- MIL-STD-704E, ARP 5015, DFS 400 and ISO 6858 Compliant
- Indoor/Outdoor (Hangar/Ramp) Use
- Automatic Input Line Monitoring
- ETL Listed to ANSI/ UL Standard 508
- Automatic Line Drop Compensation (ALDC)
- Emergency Mushroom "OFF" Switch
- Dual Output with Individual Safety Disconnect
- Built-in Maintenance Diagnostics
- Advanced Integrated Digital (AID™) Control Console
- Output Voltage and Current Monitoring
- Internal Elapsed Time Meter
- Front Panel Summary Fault Indicators
- Half-Load Redundancy

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 over head applications, such as under passenger boarding bridges, in maintenance hangars, and other fixed installations.

The **400 Hz Bridge-Mounted Low ProFile™ GPU** provides up to 180 kVA output power and is designed to service the largest commercial aircraft on the market today. The dual units that form the system can operate independently; each providing half-load redundancy, individual safety disconnect and automatic line drop compensation.

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)
- 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)
- Up to 500% Overload (dependent on rating)
- Remote Control Operation from Cockpit or Plug Head
- Alternate Mounting Configurations Available
- Analog Control Panel

ISO 9001



Registered to ISO 9001:2000

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:	120 kVA = 1500 lbs. (680 kgs)
(may vary depending upon options selected)	150 kVA = 1640 lbs. (744 kgs)
	180 kVA = 1750 lbs. (794 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	37.5 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

