

## GFC SERIES PwrKart™ 400 Hz GROUND POWER UNIT 60 kVA to 90 kVA



MOBILE CONFIGURATION

### STANDARD FEATURES:

- MIL-STD-704E, ARP 5015, DFS 400 and ISO 6858 Compliant
- Indoor/Outdoor (Hangar/Ramp) 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 Current Monitoring
- Internal Elapsed Time Meter
- Front Panel Summary Fault Indicators
- Pneumatic Tires
- Built-in Cable Racks, Input & Output

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 PwrKart™ Series includes lightweight 400 Hz and 28 VDC mobile converters for aircraft ground power applications in the hangar or ramp area. With the lightest weight-to-power rating ratio in the market, all Unitron mobile units are easily maneuvered by a single person within the hangar environment. This eliminates the need for expensive towing equipment or additional labor that other GPUs may require.

Output power ratings for the **400 Hz mobile PwrKart™** range from 15 kVA to 90 kVA. Larger power ratings are available in towable, fixed and bridge-mounted configurations. In addition, Unitron offers 28 VDC and combination AC/DC GPUs.

### OPTIONS:

- Alternate Input Voltages Available (specify)
- Input Frequency 50 Hz
- 50 or 100 Foot Input Power Cable (pigtail)
- AC Output Power Cable with Plug (30 or 60 foot lengths)
- Front Panel AC Voltage Adjust ( $\pm 15\%$ )
- No Break Power Transfer (NBPT) Compatible
- Low Input Current Distortion (12-pulse)
- Dual Output with Individual Safety Disconnect from Aircraft
- 28 VDC Output
- 300% Overload (dependent on rating)
- Alternate Mounting Configurations Available

### MECHANICAL SPECIFICATIONS:

Size:	See Figure 1
Weight:	60 kVA = 835 lbs. (379 kgs.) 75 kVA = 905 lbs. (411 kgs.) 90 kVA = 960 lbs. (436 kgs.)
Construction:	Indoor/Outdoor
Cooling:	Forced Convection

**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, short circuit
Inrush Current	No greater than 100% of full load current

**ENVIRONMENTAL:**

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

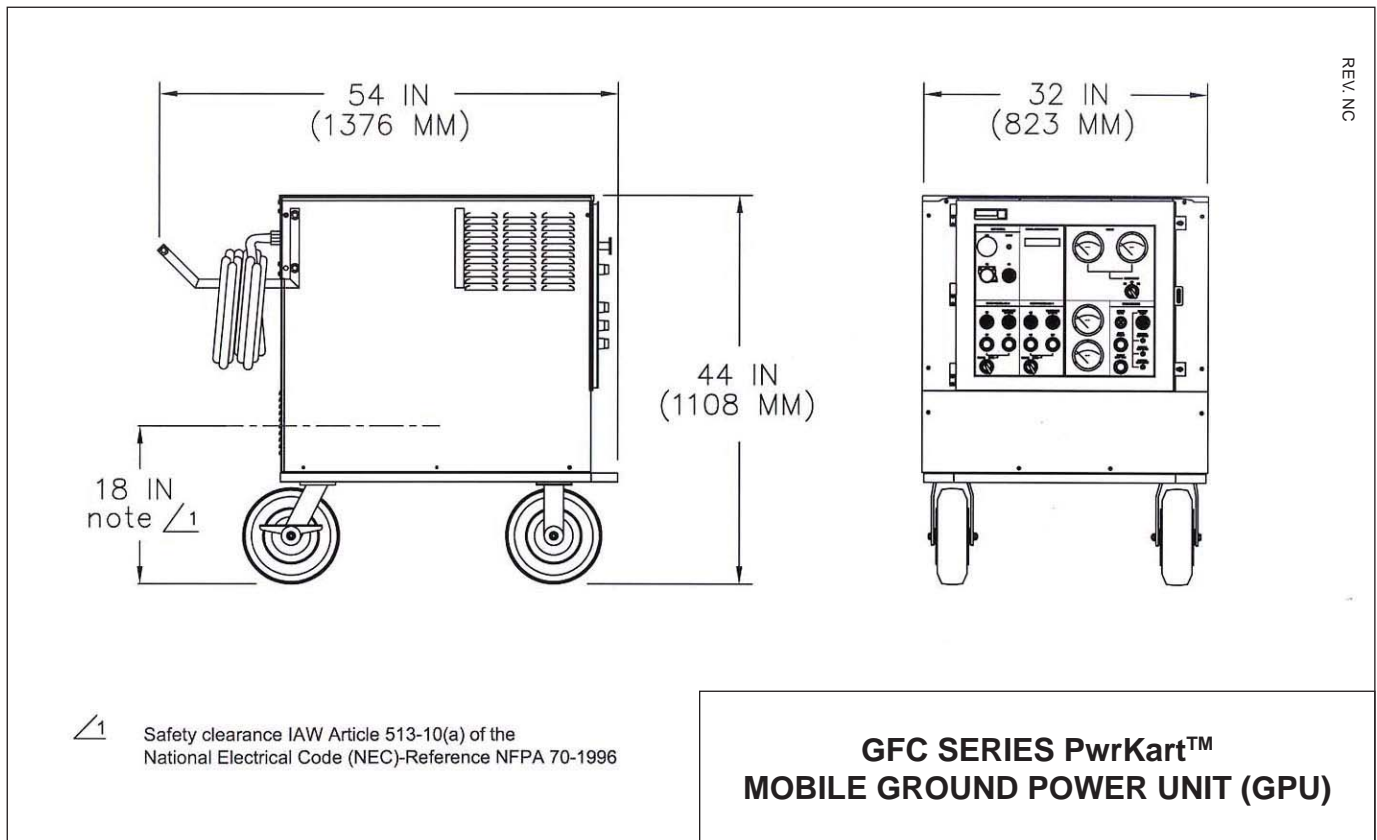
**ENERGY FACTORS:**

Efficiency	95% typical at full load, 93% typical at half load; varies depending on configuration and rating
Energy Efficiency Ratio	20.0 typical

**OUTPUT:**

Power Rating	60, 75 or 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, balanced loads 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

FIGURE 1



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

**GFC SERIES PwrKart™  
MOBILE GROUND POWER UNIT (GPU)**