

UFC Low ProFile™ SERIES 400 Hz GROUND POWER UNIT 180 or 200 kVA



FIXED CONFIGURATION
(Shown with optional analog front panel)

STANDARD FEATURES:

- CE Mark certified
- 3 Phase, 380-480 VAC input
- ≤ 5% Input Current Distortion
- Automatic Input Line Monitoring
- Advanced Integrated Display (AID™) Console
- 8000 Event Log / Diagnostics
- USB, ETHERNET, RS 485 and Serial Port
- 15% Automatic Line Drop Compensation (ALDC)
- Emergency Power "OFF" Switch (EPO)
- No Break Power Transfer (NBPT) Compatible
- I/O Voltage, Current, & Frequency Monitoring
- Elapsed Time Meter
- Front Panel Summary Fault Indicators
- Forklift Tubes - 4 Inch
- Input High Voltage Transient Protection (Lightning Strikes) with Front Panel Preventative Maintenance annunciation
- Multi Language Display (English, French, German, Italian, Russian and Spanish)

This product was manufactured in a plant whose quality management system is registered to ISO 9001:2008.

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 20 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:

- 300% Overload for 6 sec.
- Indoor Touch Screen Panel, Analog Panel
- Alternate Output Voltages (120/208V, 575V)
- Input/Output Contactor
- Auto Restart
- Parallelable, N+1, Hot Swap (contact factory for details)
- Custom Paint & Decals (Standard Color - White)
- Ground Fault Monitor
- Lockable Front Door
- Alternate Mounting Configurations Available
- Stand - 4, 12 or 18 Inch

MECHANICAL SPECIFICATIONS:

Size: See Figure 1
 Weight: 1,963 lbs. (891 kg.)
 Construction: Indoor/Outdoor
 Cooling: Forced Convection

SPECIFICATIONS / STANDARDS:

EN 61000-6-2*	Electromagnetic compatibility Immunity standard for industrial environments
EN 61000-6-4*	Electromagnetic compatibility Emission standard for industrial environments
2006/95/EC*	Low Voltage Directive
ISO 1540	Characteristics of aircraft electrical system
ISO 6858	Aircraft ground support electrical supplies
SAE ARP 5015	Ground equipment 400Hz ground power performance requirement
MIL-STD-704F	Aircraft electric power characteristics
MIL-STD-1472	Human Engineering Design Criteria
DFS-400	Specification for 400Hz aircraft power supply

*Defined Basis of CE Mark Certification

GENERAL SPECIFICATIONS

INPUT:

Input Current Distortion	≤ 5%, typically 3%
Voltage	380 to 480 volts, +10%, -15%, 3Ø, 3 wire plus ground (Alternate voltages - specify)
Frequency	50 - 60 Hz ± 10%
Phase Rotation	Any
Protection	Over/undervoltage, loss of phase, overcurrent, short circuit. Voltage transient protection IAW IEEE C62.41.Location Cat. B/C
Inrush Current	No greater than 100% of full load current

ENVIRONMENTAL:

Acoustical Noise	< 65 dBA at 5 feet (1.5m) (60 dBA typical)
Temperature Range	-40°C to +55°C
Relative Humidity	10 - 95%
Enclosures	NEMA 3R IP24 (optional IP54 or IP55; contact factory)

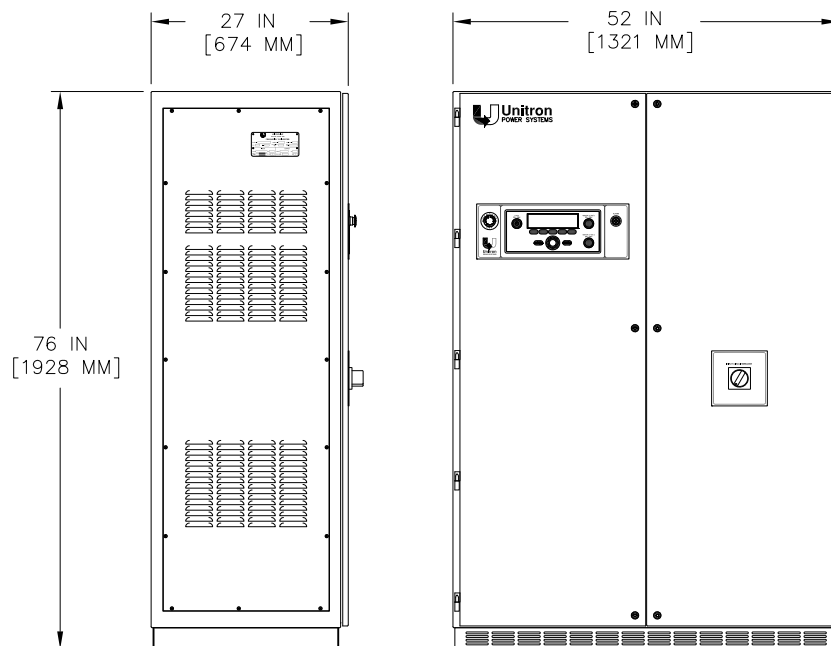
ENERGY FACTORS:

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

OUTPUT:

Power Rating	180 or 200 kVA (specify)
Overload	150% for 5 min., 200% for 20 sec.
Voltage	115/200 volts, 3Ø, 4 wire, grounded neutral
Crest Factor	1.414 ± 3%
Voltage Regulation	± 1.0% under all conditions of line, balanced loads 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	± 1° for balanced loads; ± 2° for unbalanced loads
Harmonic Distortion	≤ 2.0%, typical 1.5%
Protection	Overload, short circuit, over/undervoltage and safety disconnect
Automatic Line Drop Compensation (ALDC)	15%, internal adjustment

FIGURE 1



UFC Low ProFile™ SERIES GROUND POWER UNIT (GPU)