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

BOARDING BRIDGE CONFIGURATION
(Shown with touch scree front panel)

STANDARD FEATURES:

- IP55
- Certified to UL 1012
- 3 Phase, 380-480VAC input
- Indoor/Outdoor (Hangar/Ramp) Use
- ≤ 5% Input Current Distortion at max load
- Automatic Input Line Monitoring
- Advanced Integrated Display (AID™) Console
- 8000 Event Log / Diagnostics
- Internal Communication Ports - USB, RJ45 (ETHERNET), RS485 (Modbus), & RS232
- External Communication Port – USB
- 15% Automatic Line Drop Compensation
- Emergency Power “OFF” Switch
- 18-Inch Hazard Area Clearance
- I/O Voltage, Current, & Frequency Monitoring
- Elapsed Time Meter
- Sleep Mode
- Front Panel Voltage Adjust
- Front Panel Summary Fault Indicators
- Single Input Connection
- Input High Voltage Transient Protection
- Multi Language Display - Arabic, Asian, English, French, German, Italian, Portuguese, Russian and Spanish, Others - Specify

MECHANICAL SPECIFICATIONS:

Size:	See Figure 1
Weight:	120.0kVA = 1,582lbs. (718kg.)
	150.0kVA = 1,733lbs. (786kg.)
	180.0kVA = 1,902lbs. (863kg.)
Enclosure:	NEMA 250 - Type 3SX
Cooling:	Forced Convection

This product was manufactured in a plant whose quality management system is registered to ISO 9001:2015.

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 115/200VAC, 400Hz, 28VDC, and 270VDC 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. The **400Hz fixed Low ProFile unit** provides up to 180kVA output power and is designed to service the largest commercial and military aircraft on the market today. The dual outputs provided can be single source controlled, be individually voltage regulated and line drop compensated, and configured for partial redundancy.

Output power ratings for these **400Hz** Ground Power Units (GPUs) range from 20kVA to 180kVA. Dependent upon rating, these units are available in mobile, towable, fixed and bridge-mounted configurations. When ramp or floor space is a premium, the **Low ProFile** GPU can be installed as an overhead mounted unit.

In addition to bridge mounted GPUs, Unitron offers mobile, fixed and towable configurations.

OPTIONS:

- Alternate 3-phase, Input Voltages of 208-240 or 600VAC
- Various Convenience Outlets (Specify Voltage and Frequency)
- AC Output Power Cable with Aircraft Plug (Specify Length)
- Output Universal Aircraft Safety Interlock Circuit Disconnect (Single or Dual)
- External Communication Port - Ethernet
- Output Safety Disconnect
- Alternate third or fourth outputs - 28VDC each at 600 Amps continuous with Individual Safety Disconnect from aircraft
- Individual Output Voltage Regulation / ALDC
- Second 28VDC output
- 300% overload for 6 seconds
- TCP/IP/Ethernet interface (Modbus)
- Indoor Touch Screen Panel
- No Break Power Transfer Compatible
- Custom Paint & Decals (Standard Color - White)
- Ground Fault Monitor
- CSA Certified
- CE Mark Certified
- Alternate Mounting Configurations Available
- Stand - 4, 12 or 18 Inch
- Forklift Tubes - 4 Inch
- Leg Kit - 12 or 18 Inch
- Neutral Interrupt Protection
- Universal Safety Interlock

SPECIFICATIONS / STANDARDS (Meets of Exceeds):

NFPA 70 (NEC 500)	SAE ARP 5015
EN 60079-10	MIL-STD-1472
DFS-400	MIL-STD-704F
ISO 461-1/2	UFGS 26 35 43
ISO 1540	EN 61000-6-2 and -4**
ISO 6858	2006/95/EC**

**Defined Basis of CE Mark Certification

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GENERAL SPECIFICATIONS

INPUT:

Input Current Distortion	≤ 5%, typically 3%
Voltage	380 to 480 volts, +10%, -15%, 3Ø, 3 wire plus ground (Alternate Voltages Available)
Frequency	50-60 Hz ± 10%
Phase Rotation	Any
Protection	Over/undervoltage, loss of phase, overcurrent, short circuit. Voltage transient protection IAW IEEE C62.41.1, Location Cat. B/C
Inrush Current	No greater than 100% of full load current

ENVIRONMENTAL:

Acoustical Noise	< 65 dBA maximum at 5 feet (1.5m)
Temperature Range	-40°C to +55°C
Relative Humidity	10 - 95%, Non-Condensing
Ingress of Water	Type 3SX, IP55

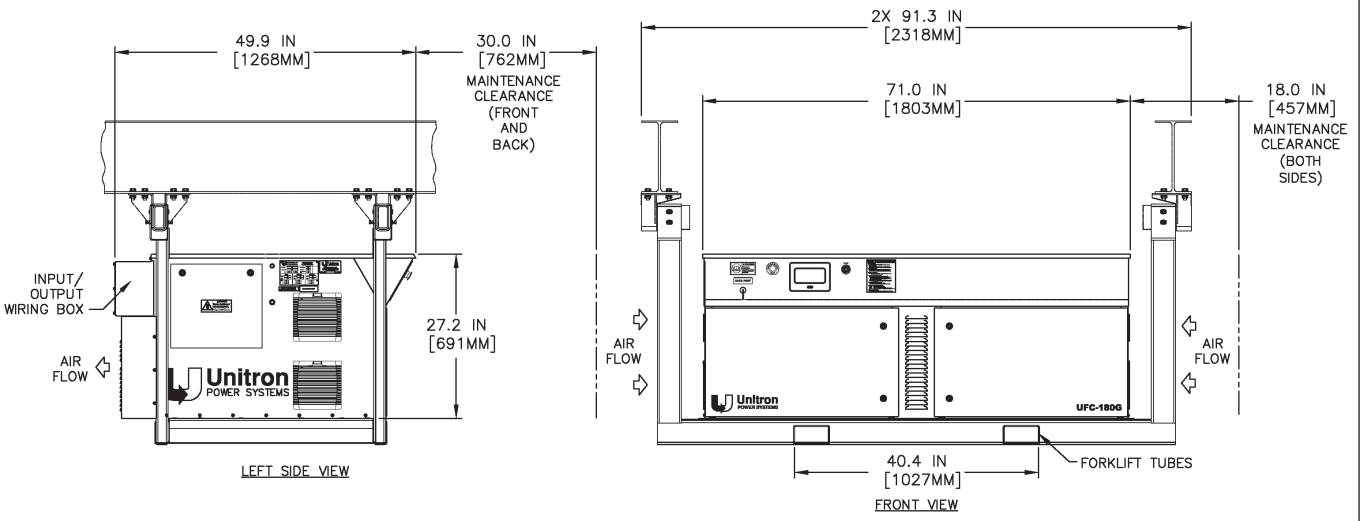
ENERGY FACTORS:

Efficiency	94% typical at full load; 92% typical at half load; varies depending on configuration
Energy Efficiency Ratio	20.0 typical

OUTPUT:

Power Rating	120, 150, or 180 kVA (Specify)
Power Factor Range	0.5 lagging to 0.8 leading
Overload	100% continuous 110% for 60 min 125% for 10 min 150% for 2 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% maximum
Protection	Overload, short circuit, over/undervoltage and safety disconnect
Automatic Line Drop Compensation (ALDC)	15%

FIGURE 1



UFC SERIES Low ProFile™
Boarding Bridge Mount
GROUND POWER UNIT (GPU)