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.

Output power ratings for the 400Hz Horizontal Low ProFile Ground Power
Unit (GPU) range from 20kVA to 180kVA. Larger power ratings are available in
towable, fixed and bridge-mounted configurations. When ramp floor space is a
premium, the Low ProFile GPU can be installed as an overhead mounted unit.

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

OPTIONS:
- Alternate Input Voltage Range 3-phase, 208-240 or 600VAC Input
- Various Convenience Outlets (Specify Voltage and Frequency)
- 50 or 100 Foot Input Power Cable (Pigtail, Specify Required Length)
- AC Output Power Cable with Plug (Specify Required Lengths - Available
  in 30 or 60 foot standard lengths)
- External Communication Port - Ethernet
- Input & Output Cable Racks
- Output Universal Aircraft Safety Interlock Circuit Disconnect
  (Single or Dual)
- Output Safety Disconnect
- No Break Power Transfer Compatible
- Bench Top Voltage Adjust
- 28VDC or 270VDC output
- Second 28VDC output
- Indoor Touch Screen Panel
- Custom Paint & Decals (Standard Color - White)
- Ground Fault Monitor
- Lockable Front Door
- CSA Certified
- CE Mark Certified
- Alternate Mounting Configurations Available
- Stand - 4, 12 or 18 Inch*
- Leg Kit - 12 or 18 Inch*
- Forklift Tubes - 4 Inch
- Neutral Interrupt Protection
- Universal Safety Interlock

* IAW NFPA 70, Article 513.10 (c) (1) - 18 Inch Rule (18" Leg Kit & Stand only)

MECHANICAL SPECIFICATIONS:
Size: See Figure 1
Weight:
- 20.0kVA = 543lbs. (246kg.)
- 30.0kVA = 600lbs. (272kg.)
- 45.0kVA = 687lbs. (312kg.)
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.

SPECIFICATIONS / STANDARDS (Meets or 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
**GENERAL SPECIFICATIONS**

**INPUT:**
- Input Current Distortion: ≤ 5%, typically 3%
- Voltage: 380 to 480 volts, +10%, -15%, 3Ø, 3 or 4 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: 93% typical at full load; 90% typical at half load; varies depending on configuration
- Energy Efficiency Ratio: 20.0 typical

**OUTPUT:**
- Power Rating: 20, 30, or 45 kVA (Specify)
- Power Factor Range: 0.5 lagging to 0.8 leading
- Overload: 100% continuous
- Voltage: 150% for 2 min
- 200% for 20 sec (45kVA)
- 300% for 20 sec (30kVA)
- 450% for 20 sec (20kVA)
- Voltage*: 115/200 volts, 3Ø, 4 wire, grounded neutral
- Voltage Adjust*: ± 15%
- 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%

**NOTE**
*Also available 120/208 VAC, adjustable ±10%

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**FIGURE 1**

(UFC-1) External Communication Port

Operating Procedures Placard

Optional Side Cable Storage Hangers

Forklift Provisions

Optional 4 in (102 mm) and 18 in (457 mm) Leg Kits Available

UFC SERIES Low ProFile™
GROUND POWER UNIT (GPU)