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 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 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 Length - 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
- Bench Top Voltage Adjust
- 28VDC or 270VDC output
- Second 28VDC output
- Indoor Touch Screen Panel
- Output Safety Disconnect
- Bench Top Voltage Adjust
- Universal Touch Screen Panel
- Alternate Mounting Configurations Available
- Neutral Interrupt Protection
- Universal Safety Interlock

MECHANICAL SPECIFICATIONS:
Size: See Figure 1
Weight:
- 20.0kVA = 543lbs. (246kg.)
- 30.0kVA = 600lbs. (272kg.)
- 45.0kVA = 687lbs. (312kg.)
- 60.0kVA = 773lbs. (351kg.)
- 75.0kVA = 850lbs. (386kg.)
- 90.0kVA = 937lbs. (425kg.)
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.
### 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 - specify)
- Frequency: 50 - 60 Hz ± 10%
- Phase Rotation: Any
- Protection: Over/undervoltage, loss of phase, overcurrent, short circuit. Voltage transient protection IAW IEEE C62.41.1, 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: 20, 30, 45, 60, 75, or 90 kVA (Specify)
- Power Factor Range: 0.5 lagging to 0.8 leading
- Overload:
  - 100% continuous
  - 125% for 10 min
  - 200% for 20 sec (45-90kVA)
  - 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%**

---

**FIGURE 1**

**UFC SERIES Low ProFile™**
**GROUND POWER UNIT (GPU)**

Specifications subject to change without notice