

## UFC SERIES FlatPak™ 400Hz GROUND POWER UNIT 150-200kVA



(Shown with standard touch screen front panel, optional bottom privacy panel, and outdoor plenums)

### STANDARD FEATURES:

- IP55
- Certified to UL 1012
- 3 Phase, 4 wire, 380/200 to 480/277VAC Input (Specify)
- 50/60 Hz input
- ≤ 5% Input Current Distortion at max load
- Automatic Input Line Monitoring
- Advanced Integrated Display (AID™) Console
- 8000 Event Log / Diagnostics
- TCP/IP/Ethernet Interface (Modbus)
- Internal Communication Ports - USB, RJ45 (Ethernet), RS485 (Modbus), & RS232
- External Communication Port - USB
- 15% Automatic Line Drop Compensation
- Emergency Power "OFF" Switch
- I/O Voltage, Current, & Frequency Monitoring
- Elapsed Time Meter
- Front Panel Voltage Adjust
- Front Panel Summary Fault Indicators
- Forklift Tubes - 4 Inch
- Input High Voltage Transient Protection
- Multi Language Display - Arabic, Asian, English, French, German, Italian, Portuguese, Russian and Spanish, Others - Specify

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 FlatPak Series includes 400Hz 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.

Standard output power ratings for the **400Hz FlatPak Converter** range from 20kVA to 400kVA. For higher system ratings to 2MW, contact factory. In addition to fixed units, Unitron offers 400Hz, 28VDC and combination AC/DC converters in mobile and towable configurations. Also available are 270VDC outputs at various power ratings.

### OPTIONS:

- Second 28VDC output
- Alternate Output Voltages (120/208V, 600/345V)
- Various Convenience Outlets (Specify Voltage and Frequency)
- External Communication Port - Ethernet
- Input/Output Contactor
- Input and/or Output Circuit Breaker
- Auto Restart
- 300% overload for 6 seconds
- Non Linear Load
- Parallelable (Grid Expansion)
- Redundant (N+1/Hot Swap)
- Custom Paint & Decals (Standard Color - White)
- Ground Fault Monitor
- Lockable Front Door
- CSA Certified
- CE Mark Certified
- No Break Power Transfer Compatible (Aircraft Load)
- Touch Screen Front Panel
- Stand - 4, 12 or 18 Inch
- Neutral Interrupt Protection
- Universal Aircraft Safety Interlock (Single or Dual)
- 28VDC Aircraft Safety Interlock (Single or Dual)
- Anti-Condensation Heater(s)

### MECHANICAL SPECIFICATIONS:

Size: See Figure 1  
 Weight: See Figure 1  
 Enclosure: NEMA 250 - Type 3SX  
 Cooling: Forced Convection

### 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	380/200V to 415/240V or 480/277V, +10%, -15%, 3Ø, 3 or 4 wire plus ground (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

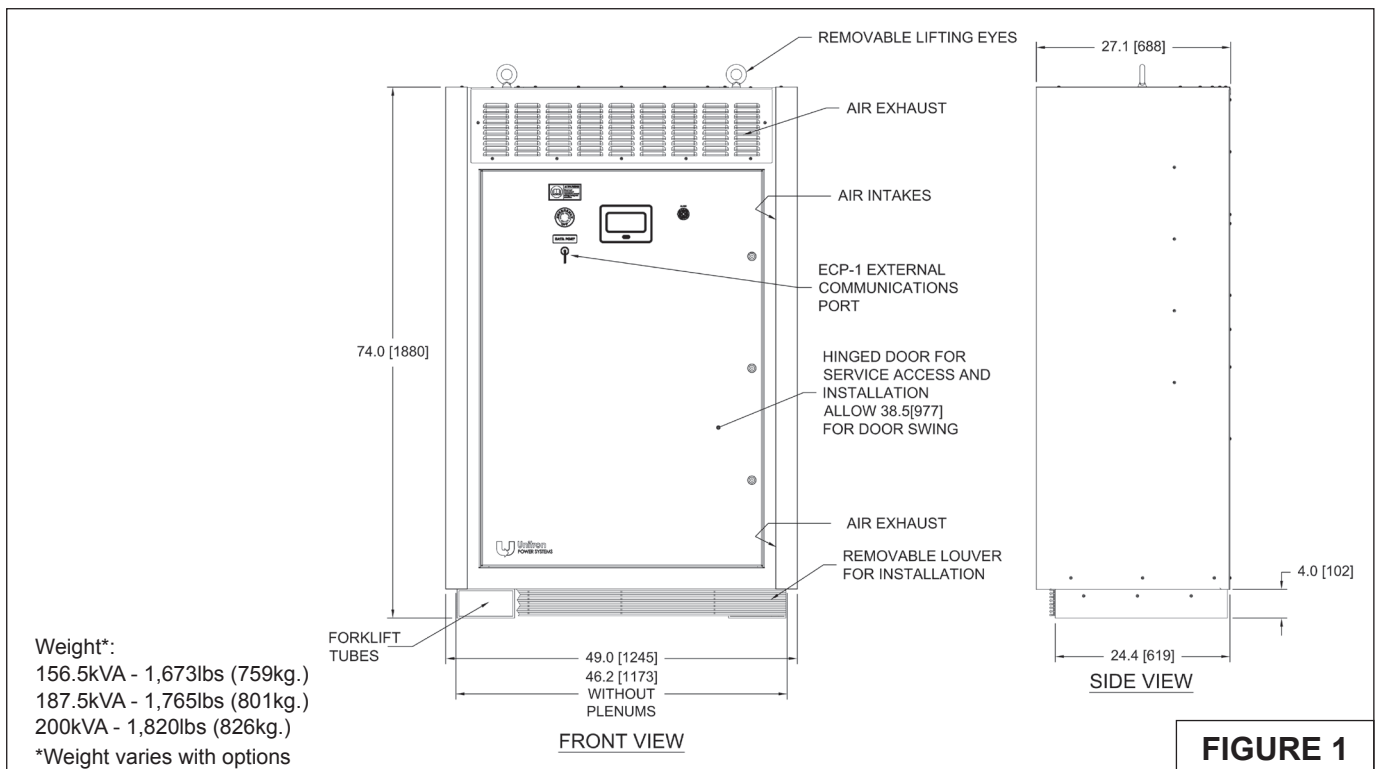
### ENERGY FACTORS:

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

### OUTPUT:

Standard Power Ratings	150, 156.5, 180, 187.5, 200 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%

NOTE:  
\*\*Alternate output voltages available when specified



**FIGURE 1**