

UFC SERIES FlatPak™ 400Hz GROUND POWER UNIT 20kVA - 45kVA



FIXED CONFIGURATION
(Shown with standard touch screen front panel)

STANDARD FEATURES:

- IP55
- Certified to UL 1012
- 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
- 10% Automatic Line Drop Compensation
- Emergency Power "OFF" Switch
- 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.

Output power ratings for the **400Hz FlatPak Converter** range from 20kVA to 400kVA. In addition to fixed units, Unitron offers 400Hz, 28VDC and combination AC/DC converters in mobile and towable configurations.

OPTIONS:

- Alternate 3Ø Input Voltages, 208-240, 308-415, or 600VAC - Specify
- Various Convenience Outlets (Specify Voltage and Frequency)
- External Communication Port - Ethernet
- Output Universal Aircraft Safety Interlock Circuit Disconnect (Single or Dual)
- Output Safety Disconnect
- Indoor Touch Screen Panel
- Alternate Output Voltages (120/208V, 575V)
- Input/Output Contactor
- Auto Restart
- Bench Top Voltage Adjust
- 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
- Stand - 4, 12 or 18 Inch
- Neutral Interrupt Protection
- Universal Safety Interlock
- ≤ 5% Input Current Distortion at max load
- Input Auto Ranging
- 15% ALDC

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)	ISO 461-1/2
EN 60079-10	ISO 1540
UFGS 26 35 43	ISO 6858
DFS-400	MIL-STD-1472
SAE ARP 5015	MIL-STD-704F

GENERAL SPECIFICATIONS

INPUT:

Voltage*	380-480V, ± 10%, 3Ø, 3 wire plus ground (Additional Alternative 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:

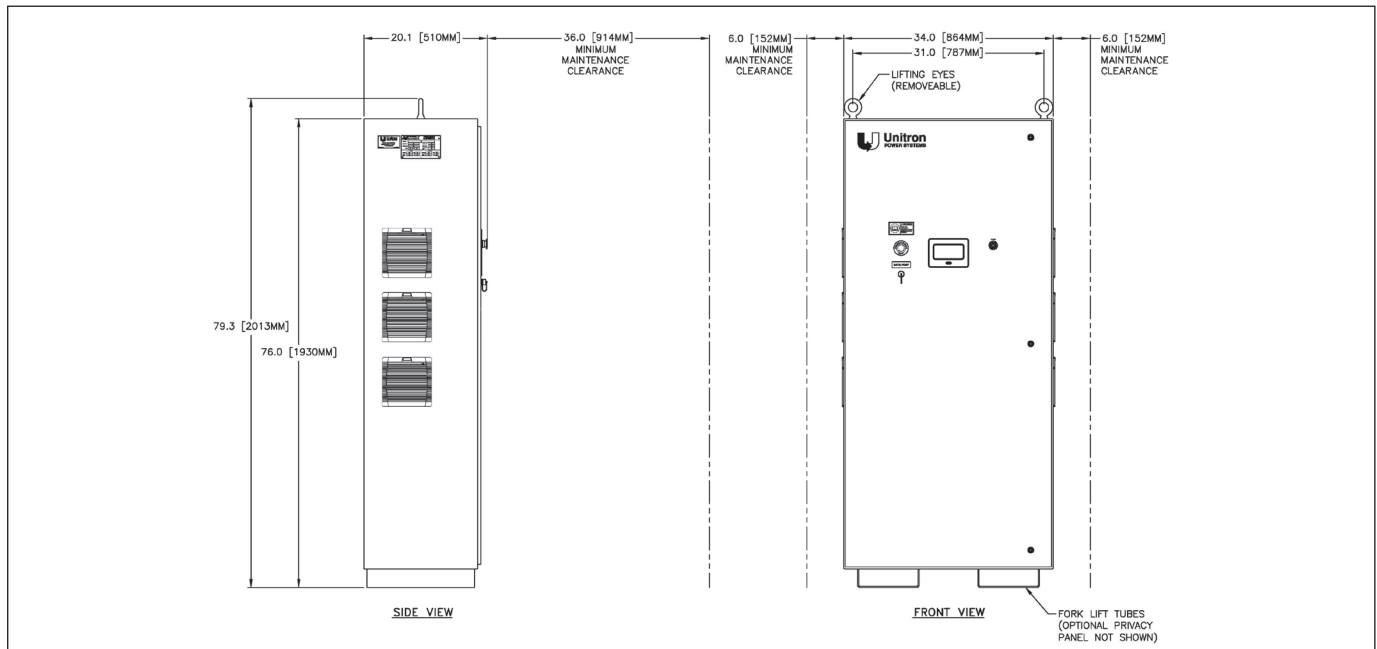
Efficiency	94% typical at full load, 92% typical at half load; varies depending on configuration
Energy Efficiency Ratio	20.0 typical

OUTPUT:

Power Rating	20, 30, or 45 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 (45kVA)	300% for 20 sec (30kVA)
450% for 20 sec (20kVA)	
Voltage**	115/200 volts, 3Ø, 4 wire, grounded neutral
Crest Factor	1.414 ± 3%
Voltage Regulation	
■ Continuous rated load and ±10% input voltage	± 0.5%
■ No load to rated load with nominal input voltage	IAW ISO 6858 and MIL-STD-704F
■ Overload with nominal	See start mode curves
Voltage Transients	IAW MIL-STD-704F
Voltage Adjust**	± 15%
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)	10%

NOTE:
 *For CE Mark Applications Specify Option I-5.
 **Also available 120/208 VAC, adjustable ±10%

FIGURE 1



Weight*:

20.0kVA = 485lbs. (220kg.)	30.0kVA = 515lbs. (234kg.)
45.0kVA = 540lbs. (245kg.)	*Weight varies with options

**UFC FlatPak™ SERIES
GROUND POWER UNIT (GPU)**