APPLICATION:
Since its beginning in 1960, Unitron has specialized in the design and development of reliable, solid-state power systems. 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.

Each of the two identical power bays which each operate in paralleled harmony to give the desired power grid rating. Each of the bays can be located in near proximity (side by side or back to back) or in different areas of a utility room depending upon "niche" space available.

For those applications desiring (N+1)/Hot Swap Redundancy, the FlatPak Series can also be provided with an optional centrally located I/O Power Distribution Unit (PDU) to facilitate a more economical solution than requiring separately furnished PDUs.

Output power ratings for the 400Hz FlatPak Converter range from 20kVA to 400kVA in a single bay configurations and up to 800kVA in (N+1)/Hot Swap fully redundant systems where critical loads are involved. Additionally, the redundant configurations can be provided with "Load Management" to assure the most efficient level of operation for various load conditions. Contact factory for more details on Redundant Configurations.

OPTIONS:
- 300% Overload for 6 sec.
- Alternate Output Voltages (208/120V, 600/345V)
- Various Convenience Outlets (Specify Voltage and Frequency)
- External Communication Port - Ethernet
- Input/Output Contactor
- Input and/or Output Circuit Breaker
- Auto Restart
- 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
- Stand - 4, 12 or 18 Inch
- Neutral Interrupt Protection
- Universal Aircraft Safety Interlock (Single or Dual)
- Non Linear Load
- Anti-Condensation Heater(s)

MECHANICAL SPECIFICATIONS:
Size: See Figure 1
Weight: 3,333 lbs (1,512 kg.)
Enclosure: NEMA 250 - Type 3SX
Cooling: Forced Convection

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

**Defined Basis of CE Mark Certification

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

## OUTPUT:

### Standard Power Ratings:
- 312 kVA

### 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:
- 575 volts, 3Ø, 3 wire

### 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**