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 of 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

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**: 380/200V 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
- **Voltage**: 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**