400Hz Solid-State Converter

60kVA to 90kVA Solid-State Frequency Converter

Our 400 Hz Frequency Converter provides a complete fully integrated and tested system which is ready to install as delivered. Front access for all service and maintenance functions. 30-40% space and weight savings compared with competitive products. The compact light weight adaptable design allows flexible installation options. It can be floor mounted, overhead mounted.

Advantages
- NFPA 70 Article 500 Class 1 Div. 2 compliant with 18” Floor Stand
- Easy-to-read Digital Information Display
- Modular design allows for ease of maintenance
- BIT: Digital diagnostics aid troubleshooting

Performance Features
- Individual phase regulation at aircraft interface, perfect voltage regulation even with unbalanced loads
- Meets and exceeds MIL-STD-704F requirements
- Total harmonic content <2%
- Soft Start feature eliminates in-rush current
- 12 Pulse front end for low input current harmonics
Specifications
400Hz Solid-State Frequency Converter, 60kVA - 90kVA

Input Power
- Rated current: 94 amps ± 5% @ 480 VAC, 60 Hz
- Rated current: 115 amps ± 5% @ 400 VAC, 50 Hz

Output
- Power: 90 kVA @ 0.8 pf Lag
- 115/200 V - WYE, ABC-N
- Frequency: 400 Hz ± 0.1%
- Power factor: 0.5 lag to 0.9 lead
- Voltage regulation: <1%
- Transient performance exceeds MIL-STD-704F
- Crest factor: 1.414 ± 3%
- Overload Rating:
  - 110% for 60 minutes
  - 125% for 5 minutes
  - 150% for 2 minutes
  - 200% for 20 seconds
  - 300% for 6 seconds

Efficiency
- 12 pulse Front End
- Overall efficiency:
  - >0.93 at 60-90 kVA load
  - >0.90 at 25 kVA load
- No load loss: <2 kW

Protection
- No break power transfer
- Over/under voltage: Input and Output
- Overload
- Short circuit
- High temperature
- Internal system error

Environmental
- Operating temperature: -40°C to +55°C
- Relative humidity 0—95%
- Airborne Noise <65 dba @ 1m - typically 60 dba

Miscellaneous
- MTBF (Proven): 100,000 hours
- MTTR: max. 20 minutes

Standards/Specifications
- MIL-STD-704F Aircraft electric power characteristics
- UFGS-26 35 43 Unified Guide Specification
- ETL Listed to UL1012
- NFPA 70 Article 500
- 18” Floor Stand

Options
- External Emergency Stop
- 400Vac/50hz Input

The 400Hz Converter is compatible with these aircraft and others:
- F-15 Eagle
- F-16 Falcon
- F-18 Hornet
- Mirage
- Sukhoi-30
- Eurofighter
- JAS 39 Gripen
- Blackhawk
- Apache

Specifications subject to change without notice.