



PATLON
AIRCRAFT & INDUSTRIES LTD

JO3C

400HZ Converter PA11137B 90kVA

ENVIRONMENTAL

- Operating Temperature: -40°C to +55°C
- Relative Humidity 0-95%
- Airborne Noise <65DB@1M
- IP-23
- Heat loss @ full load with .8PF = 5kW

CERTIFICATIONS

- MIL-STD-704F - Aircraft Electrical Power Characteristics
- DFS400
- BS 2G 219
- SAE ARP 5015
- EN2282
- MIL-S-901D - High Impact Mechanical Shock
- MIL-STD-167-1 - Mechanical Vibrations of Shipboard Equipment
- MIL-STD-810 - Environmental
- UFGS 26 35 43 - Unified Guide Specification
- NFPA70 Article 500 Class 1 Div. 2 compliant with 18" Floor Stand
- CSA/ESA Certified
- Network Quality/Tolerance in accordance with STANAG 1008
- MIL-STD-461F
- CE101 - Waiver Issues for 3 minor peaks
- (300Hz/15A, 420Hz/3.5A, 660Hz/3.2A)
- CE102
- CS101
- CS144
- CS115
- CS116
- RE101
- RE102 - Waiver issued for 3 minor peaks
- (Narrow band .36dB / 0.35MHz, 5.96dB / 6.195MHz, 2.91dB / 11.225MHz)
- RS103





SPECIFICATIONS

KEY FEATURES

- Individual phase regulation at aircraft interface, perfect voltage regulation even with unbalanced loads.
- Meets and exceeds MIL-STD-704F requirements.
- Total Harmonic Content <3%
- Airborne Noise <65DB@1M
- Operating temperatures -40oC to +55oC
- Relative humidity 0-95%
- Foundation base frame with resilient mountings
- Weight with frame and mount 930 lbs.
- Dimensions unmounted L:1219mm W:483mm H:787mm
- Weight:
 - 328kg (725 lbs.) No Support Frame / No Cables
 - 420kg (925 lbs.) With mounting frame and shock mounts
- Digital Information Display
- Digital diagnostics aid for troubleshooting
- Building Management System compatible
- Soft Start Feature eliminates inrush current
- EMI Hardened Shell

INPUT

- Input voltage: 400 to 500Vac
- Input frequency: 45 to 65Hz
- Inrush current: None (0)
- FLA: 30kVA- 45 Amps +/-15%
45kVA- 65 Amps +/-15%
50kVA- 73 Amps +/-15%
60kVA- 88 Amps +/-15%
90kVA- 130 Amps +/-15%



EFFICIENCY

- MTBF: 100,000 hours
- MTTR: 20 mins.
- Enclosure: Sheet Metal
- Enclosure painted Canada Gray 501-109 Shipside, Federal Standard Color Grey 16480, per AMS-STD-595 color specification.
- Cooling method: Air



EFFICIENCY

- Overall Efficiency:
 - 0.93 at 35 - 90kVA Load
 - 0.90 at 25kVA Load
- No Load Loss: <2kW

OUTPUT

- Rated Power: 30-45-50-60-90kVa, PF 0.8 Lag
- Voltage: 3x 115/200 VAC, WYE, ABC-N
- Frequency: 400 Hz +/-0.1%
- Power Factor: 0.5 lag to 0.8 lead
- Voltage Regulation: <1%
- Transient Performance: Exceeds MIL-STD-704
- Asymmetrical Load: Up to 100% with In<1
- Crest Factor: 1.0414 +/-3%
- Overload Rating @all kVA Ratings
 - 125% for 10 minutes (90kVA = 112.5kVA)
 - 150% for 30 seconds (90kVA = 135kVA)
 - 200% for 10 seconds (90kVA = 180kVA)
 - 250% for 1 second (90kVA = 270kVA)
 - 1000 amps for 2.5ms (All kVA models)

PROTECTION

- Over/Under Voltage: Input and Output
- Overload
- Short Circuit
- High Temperature
- Internal System Error
- No Break Power Transfer