



**FREQUENCY CONVERTER SPECIFICATION  
GEORATOR CORPORATION  
MANASSAS, VIRGINIA 20110**

Model No. 39-004-2  
Type 22-A Vertical Frequency Voltage Regulated Converter  
(Military with Drip Cover)

**1.0 INPUT:**

- 1.1 Motor: AC Induction, 10 H.P., 3 Phase, 60 Hz, 1,760 RPM (Nom.)
- 1.2 Input Voltages: 220/440VAC ±10%
- 1.3 Input Current: 30/15 Amps Approx.
- 1.4 Insulation: Class F – Fungus Proof Varnish

**2.0 OUTPUT:**

- 2.1 Generator: Permanent Magnet Excitation
- 2.2 Rating: 6.5 kVA, 80% to 100% PF, 3 Phase
- 2.3 Output Frequency: 420Hz @ N.L., 410Hz Min. @ F.L.
- 2.4 Output Voltage:
  - 2.4.1 No Load: AC Values before Regulation and Rectification:
    - (A) Power Winding: 146VAC ±1V L-N
    - (B) Control Winding: 57VAC ±1V L-L
  - 2.4.2 Full Load: 120/208VAC 4W Wye, or 120VAC 3W Delta; Re-Connectable
  - 2.4.3 Stability: Within ±1%, for constant Load and constant Input Frequency.  
Less than 1% for Input Voltage Variation of ±10%
  - 2.4.4 Waveform: Total Harmonic Distortion (THD) less than 4%
  - 2.4.5 Regulation: Electronic Control; ±1.5% from N.L. to F.L.
  - 2.4.6 Adjustment: ±5%
- 2.5 Output Current: 18 Amps (Wye Connection), or 31.3 Amps (Delta)
- 2.6 Insulation: Class F – Fungus Proof Varnish

**3.0 GENERAL SPECIFICATIONS:**

- 3.1 Construction: Common Vertical Shaft (Stainless Steel), Double Bearing, Contained in Aluminum Alloy Mot. Housing (Top), and Gen. Housing (Bottom) – Dripproof Protected (IP12, IC01) Per NEMA MG1 1.25.1
- 3.2 Duty: Continuous
- 3.3 Max. Amb. Temp.: 50 °C
- 3.4 Cooling: Self Circulated Air via rotor mounted internal Fan. NEMA IC01
- 3.5 Rotation: Reversible by electrical reconnection of Input
- 3.6 Dielectric Strength: Winding to Frame: 1500 V for 1 Min.
- 3.7 Vibration: Within 0.0015”
- 3.8 Bearings: Sealed Life Time Lubricated Ball Bearings with Grease per Mil-G-23827A
- 3.9 Finish:
  - 3.9.1 Primer: Modified Alkyd Resin
  - 3.9.2 Paint: Silver-Blue Enamel
- 3.10 Approx. Weight:
  - 3.10.1 Net: 315 Lbs.
  - 3.10.2 Shipping: 380 Lbs.

Rev.	Date	Revision Description
ENGINEER	M.T.E.	
APPROVED BY		4/12/2000