g		GE Energy		Functional 1	Testing Spo	ecification			
	Parts & Repair Services Louisville, KY			LOU-GED-DC2000					
	Test Procedure for a DC2000 Drive								
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#### 1. SCOPE

1.1 This is a functional testing procedure for a DC2000 Drive

## 2. STANDARDS OF QUALITY

**2.1** Refer to the current revision of the IPC-A-610 standard for workmanship standards.

#### 3. APPLICABLE DOCUMENTS

- **3.1** The following document(s) shall form part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue shall apply.
  - **3.1.1** Check board's electronic folder for more information

# 4. **ENGINEERING REQUIREMENTS**

- 4.1 Equipment Cleaning
  - **4.1.1** Equipment should be clean and free of debris prior to applying power unless performing an initial check. Refer to site specific SRA's for cleaning guidelines.
- **4.2** Equipment Inspection
  - **4.2.1** Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:
    - 4.2.1.1 Wires broken, cracked, or loosely connected
    - 4.2.1.2 Terminal strips / connectors broken or cracked
    - 4.2.1.3 Components visually damaged
    - 4.2.1.4 Capacitors bloated or leaking
    - 4.2.1.5 Solder joints damaged or cold
    - 4.2.1.6 Circuit board burned or de-laminated
    - 4.2.1.7 Printed wire runs / Traces burned or damaged

### 5. EQUIPMENT REQUIRED

**5.1** The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

Qty	Reference #	Description
1		Fluke 87 DMM (or Equivalent)
1		Motor Control Panel

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## 6. Testing Process

## 6.1 Setup

- **6.1.1** All circuit cards should be tested individually and installed in completed unit.
- **6.1.2** Install 100amp shunt at DA1.
- **6.1.3** Determine incoming voltage from elementary, hook up incoming 3- phase voltage wires to L1, L2, and L3. \*\*\*\*\*DO NOT APPLY POWER\*\*\*\*\*
- **6.1.4** Determine proper horsepower motor needed for testing.
- 6.1.5 Connect Armature 1 and Armature 2 from Motor Panel to DA1 and DA2 on UUT.
- 6.1.6 Connect Fld1 and Fld2 from Motor panel to 2TB1 and 2TB2 on UUT.
- **6.1.7** Connect Digital Tach from Motor panel to 3TB card on UUT.
- **6.1.8** Install test EEPROM (U9) in UUT.
- **6.1.9** Apply power to drive!!!!!
- **6.1.10** Verify all fans are rotating.
- **6.1.11** Verify control card is powered up.
- **6.1.12** Troubleshoot UUT to eliminate any fault conditions of drive.
- **6.1.13** Run a cell test on drive and verify it passes.
- **6.1.14** Run motor, ramp it up slowly.
- **6.1.15** If UUT is regenerative, verify motor runs in both directions.
- 6.1.16 Shut off Power, !!!!!!

#### 6.2 \*\*\*TEST COMPLETE \*\*\*

#### 7. Notes

7.1 None at this time.

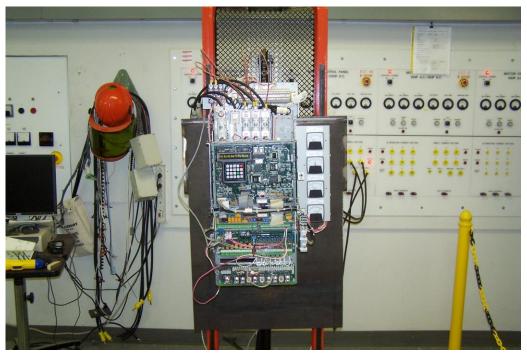
### 8. Attachments

**8.1** Picture of setup.

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