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GE Industrial Systems

**Functional Testing Specification**

*Renewal Services  
Louisville, KY*

**LOU-GED-AC2000**

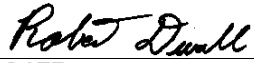
**Test Procedure for a Card**

**DOCUMENT REVISION STATUS:** Determined by the last entry in the "REV" and "DATE" column

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Lloyd Groves	7-11-02
B			
C			

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<b>DATE</b> 7-11-02	<b>DATE</b>	<b>DATE</b>	<b>DATE</b> 07/22/02

## Functional test procedure for a AC2000 drive.

### 1. SCOPE

1.1 This is a functional testing procedure for an AC2000 IGBT 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

### 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 the local documented procedures 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 or cracked

4.2.1.2 Terminal strips / connectors broken or cracked

4.2.1.3 Loose wires

4.2.1.4 Components visually damaged

4.2.1.5 Capacitors leaking

4.2.1.6 Solder joints damaged or cold

4.2.1.7 Circuit board burned or de-laminated

4.2.1.8 Printed wire runs 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		DMM
1	H033761	AC2000 IGBT

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## 6. TESTING PROCESS

### 6.1 Setup

**6.1.1** Unhook and remove test drive H033761, replace with customers unit.

### 6.2 Testing Procedure

**6.2.1** Apply power to UUT and check display for any fault indications, repair any faults before continuing. Note: Flt 179 is a temporary flt and will go away after a few seconds.

**6.2.2** Verify power supplies on control panel.

**6.2.3** Verify relays 1-6 on control panel.

**6.2.4** Verify cooling fan works.

**6.2.5** Using the keypad, Execute TEST 12 "SCR TEST".

**6.2.6** This can be done by entering the following in on the programmer: ([set], [drv], [7], [7], [Enter], [Reset], [Reset], [test], [1], [2], [Enter]

**6.2.7** LCC will display "CELL TEST PASSED".

**6.2.8** On control panel, push run switch up, motor should start turning.

**6.2.9** Adjust analog input reference up and down from 0 to 90, and verify that motor speed corresponds to reference(ms % on display).

**6.2.10** Change the position of the pol switch on control panel and verify motor changes direction.

**6.2.11** Push the reset button on control panel, and make sure drive resets.

### 6.3 \*\*\*TEST COMPLETE \*\*\*

## 7. NOTES