



GE Energy

## Functional Testing Specification

*Parts & Repair Services  
Louisville, KY*

**LOU-GED-IS200ICIA**

### Test Procedure for a

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## 1. SCOPE

1.1 This is a functional testing procedure for a Card.

## 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	H190111	DC 2000 Test Drive w/digital front end.

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## 6. Testing Process

### 6.1 Setup

- 6.1.1 Inspect the customer's card for any signs of damage or physical defects.
- 6.1.2 Remove test card from the drive and install the customer's card into the proper slot. Be sure to verify that all jumpers and connections match those on the test card.



**Note: It is recommended to make sure that the drive is functioning properly with the test card before installing the customer's card. This can be accomplished by verifying that the drive powers up properly, will perform the cell test, run, and reverse polarity without fault.**

### 6.2 Testing Procedure

- 6.2.1 Apply power to the drive.
- 6.2.2 At the computer open MY DOCUMENTS → ISDC2000 → DRIVE → Innovation Drive with DCFBG2.icb.
- 6.2.3 From there download the firmware by selecting Device → Download to Drive → Pattern Flash (runtime).
- 6.2.4 Once the firmware has downloaded select Device → Download to Drive → Parameter Values to complete that download.
- 6.2.5 Once the parameter values have been downloaded cycle power to the drive.
- 6.2.6 Verify that the drive powers up and gives voltage and current outputs on the gauges.
- 6.2.7 Left click the run wizard icon on the toolbar. Select the cell test and follow prompts to execute.
- 6.2.8 If the card passes the cell test start the drive motor by switching the RUN-34 into the on position.
- 6.2.9 Allow the motor to run for approximately 30 minutes.
- 6.2.10 Reverse the polarity of the motor by switching POL-38 switch. Allow the motor to run in that direction for another 30 minutes.

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

## 7. Notes

- 7.1 None at this time?

## 8. Attachments

- 8.1 None at this time?