



GE Energy

## Functional Testing Specification

Parts & Repair Services  
Louisville, KY

LOU-GEB-189A6394

## Test Procedure for a Rectifier Gate Firing Interface Card

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DATE 11/16/2012	DATE	DATE	DATE 11/16/2012

<b>LOU-GEB-189A6394</b> <b>REV. A</b>	<b>g</b>  <b>GE Energy</b> <i>Parts &amp; Repair Services</i> <i>Louisville, KY</i>	<b>Page 2 of 3</b>
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## 1. SCOPE

1.1 This is a functional testing procedure for a Rectifier Gate Firing Interface 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		51 Pin Universal Test Jig
2		+15VDC Power Supply
1		+5VDC Power Supply
1		+28VDC Power Supply
1		Function Generator
1		Oscilloscope

## 6. Modifications/Upgrades

6.1 Check Orange Book for any modifications or upgrades.

## 7. Testing Process

### 7.1 Testing Procedure

- 7.1.1 Insert card to be tested into the 51 pin universal test jig. Connect +15VDC to pin 4 and COM to pin 50.
- 7.1.2 Connect COM of the function generator to pin 2. Set the function generator to a 10kHz, 0 to +15V square wave with the oscilloscope.
- 7.1.3 Connect the function generator output to the following INPUTS (one at a time) on the table and observe the OUTPUTS of the table are the same as the INPUT waveform.

INPUT PIN	OUTPUT PIN
10	11
18	19
32	33
12	13
20	21
34	35
14	15
22	23
36	37
16	17
26	27
38	39

**7.2 \*\*\*TEST COMPLETE \*\*\***

## 8. Notes

8.1 None at this time.

## 9. Attachments

9.1 None at this time.