



GE Energy

## Functional Testing Specification

*Parts & Repair Services  
Louisville, KY*

**LOU-GED-531X197SSAA**

### Test Procedure for a Series Six Amplifier Card

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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		Fluke 87 DMM (or Equivalent)
2		30VDC Power Supplies
1		5VDC Power Supply

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## 6. Modifications/Upgrades

6.1 Fill out if applicable.

## 7. Testing Process

### 7.1 Setup

### 7.2 Testing Procedure

7.2.1 Connect +24Vdc to TB1 and Com. to TB2.

7.2.2 Connect a 1K ohm load resistor between TB3 and TB4.

7.2.3 Connect a voltmeter across the 1K ohm load resistor + to TB3 and – to TB4.

7.2.4 With a separate isolated power supply apply +5Vdc to pin 9 and –to pin 10 of the D shell connector.

7.2.5 The voltmeter will measure + 24Vdc +/- 5%.

7.2.6 Reverse the polarity of the 5v power supply.

7.2.7 The voltmeter will measure –24Vdc+/- 5%.

7.2.8 Remove all connections to the UUT.

7.2.9 Connect +5v to pin 23 and com. to pin 7 of the D shell connector.

7.2.10 Pin 3 of the D shell connector will measure 2.5Vdc +/-5%.

7.2.11 Pin 15 of the D shell connector will measure 0Vdc.

7.2.12 Apply an isolated +10Vdc to TB7 with com. to TB8.

7.2.13 Pin 15 of the D shell connector will measure +5Vdc +/- 5%.

7.2.14

7.3 **\*\*\*TEST COMPLETE \*\*\***

## 8. Notes

8.1 None at this time.

## 9. Attachments

9.1 None at this time.