



GE Energy

## Functional Testing Specification

*Parts & Repair Services  
Louisville, KY*

**LOU-GED-531X191RTBA**

### Test Procedure for a 531X191RTBA

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	James Archibald	04/22/2014
B			
C			

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<b>DATE</b> 04/22/2014	<b>DATE</b>	<b>DATE</b>	<b>DATE</b>

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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)
1		VARAIC

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**6. Modifications/Upgrades**

6.1 Fill out if applicable.

**7. Testing Procedure**



**7.1.1** JP1-7 to position 2-3

**7.1.2** With an DVM set to resistance check for continuity between

**7.1.3** RTB 1 to RPL 3

RTB 8 to RPL 5

RTB 15 to RPL 7

RTB 22 to RPL 9

RTB 29 to RPL 11

RTB 36 to RPL 13

RTB 43 to RPL 15

RTB 3 to RTB 4

RTB 6 to RTB 7

RTB 10 to RTB 11

RTB 13 to RTB 14

RTB 17 to RTB 18

RTB 20 to RTB 21

RTB 24 to RTB 25

RTB 27 to RTB 28

RTB 31 to RTB 32

RTB 34 to RTB 35

RTB 38 to RTB 39

RTB 41 to RTB 42

RTB 45 to RTB 46

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RTB 48 to RTB 49  
RPL 1 to OPTPL 1 and RTB 51  
OPTPL 2 to RTB 50  
Set VARAIC to zero volts  
Hook AC from VARIAC to RTB 1 and 50  
Set JP1-7 to 1-2  
Jumper RTB 1 to 8, 15, 22, 29, 36, and 43.  
Turn on VARIAC. Slowly increase VARIAC to 115 VAC  
Verify all LED's light.  
Check for continuity between  
RTB 2 to 3  
RTB 5 to 6  
RTB 9 to 10  
RTB 12 to 13  
RTB 16 to 17  
RTB 19 to 20  
RTB 23 to 24  
RTB 26 to 27  
RTB 30 to 31  
RTB 33 to 34  
RTB 37 to 38  
RTB 40 to 41  
RTB 44 to 45  
RTB 47 to 48

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

### 8. Notes

8.1 None at this time?

### 9. Attachments

9.1 None at this time?