



GE Energy

Functional Testing Specification

*Parts & Repair Services
Louisville, KY*

LOU-GED-331X421AAG0X

Test Procedure for a 331X421AAG0X

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

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PREPARED BY J. Archibald	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
DATE 8/14/2008	DATE	DATE	DATE

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1. **SCOPE**

1.1 This is a functional testing procedure for a LOU-GED-331X421AAG0X converter.

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.

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, 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	H188547	Test Light
1	H088912	Firing Box
1	20VDC Power Supply	20VDC Power Supply

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6. TESTING PROCESS

6.1 Testing Procedure

6.1.1 Testing P1SP SCR

- 6.1.1.1 Hook light across L1 and P1
- 6.1.1.2 Hook +20VDC to 1PT Pin 1 on connector
- 6.1.1.3 Hook 20 volt Common and Cathode to 1PT Pin 3 on connector
- 6.1.1.4 Hook gate to 1PT Pin 2 on connector.
- 6.1.1.5 Turn on power supply, firing box, and light..
- 6.1.1.6 Turn firing box up and light should lite and linear.

6.1.2 Testing P1SN SCR

- 6.1.2.1 Hook light across L1 and P2
- 6.1.2.2 Hook +20VDC to 1PT Pin 4 on connector
- 6.1.2.3 Hook 20 volt Common and Cathode to 1PT Pin 5 on connector
- 6.1.2.4 Hook gate to 1PT Pin 6 on connector.
- 6.1.2.5 Turn on power supply, firing box, and light..
- 6.1.2.6 Turn firing box up and light should lite and linear.

6.1.3 Testing P2SP SCR

- 6.1.3.1 Hook light across L2 and P1
- 6.1.3.2 Hook +20VDC to 1PT Pin 9 on connector
- 6.1.3.3 Hook 20 volt Common and Cathode to 2PT Pin 11 on connector
- 6.1.3.4 Hook gate to 2PT Pin 10 on connector.
- 6.1.3.5 Turn on power supply, firing box, and light..
- 6.1.3.6 Turn firing box up and light should lite and linear.

6.1.4 Testing P2SN SCR

- 6.1.4.1 Hook light across L2 and P2
- 6.1.4.2 Hook +20VDC to 2PT Pin 17 on connector
- 6.1.4.3 Hook 20 volt Common and Cathode to 2PT Pin 15 on connector
- 6.1.4.4 Hook gate to 2PT Pin 16 on connector.
- 6.1.4.5 Turn on power supply, firing box, and light..
- 6.1.4.6 Turn firing box up and light should lite and linear.

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6.1.5 Testing P3SP SCR

6.1.5.1 Hook light across L3 and P1

6.1.5.2 Hook +20VDC to 3PT Pin 21 on connector

6.1.5.3 Hook 20 volt Common and Cathode to 3PT Pin 23 on connector

6.1.5.4 Hook gate to 3PT Pin 22 on connector.

6.1.5.5 Turn on power supply, firing box, and light..

6.1.5.6 Turn firing box up and light should lite and linear.

6.1.6 Testing P3SN SCR

6.1.6.1 Hook light across L3 and P2

6.1.6.2 Hook +20VDC to 3PT Pin 26 on connector

6.1.6.3 Hook 20 volt Common and Cathode to 2PT Pin 28 on connector

6.1.6.4 Hook gate to 2PT Pin 27 on connector.

6.1.6.5 Turn on power supply, firing box, and light..

6.1.6.6 Turn firing box up and light should lite and linear.

6.2 *TEST COMPLETE *****

7. NOTES

7.1 None

8. ATTACHMENTS

8.1 None