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GE Energy

Functional Testing Specification

*Parts & Repair Services
Louisville, KY*

LOU-GED-IC3606TPAW

Test Procedure for a IC3606TPAW

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| DATE 2/25/2010 | DATE | DATE | DATE 2/25/2010 |

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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 | | 30VDC Power Supply |
| 1 | | SCR Firing Box |
| 1 | | 20 Ohm 10 Watt Resistor |
| 1 | | Oscilloscope |

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6. TESTING PROCESS

6.1 Input Connections

- 6.1.1 This card consists of two identical circuits.
- 6.1.2 Connect +28V to circuit 1 at the terminal marked +28V.
- 6.1.3 Connect COM to terminal marked COM.
- 6.1.4 Connect a SCR firing box positive to terminal marked SIG.
- 6.1.5 Connect firing box COM to COM.

6.2 Output Connections

- 6.2.1 Circuit 1.
 - 6.2.1.1 Connect a 20-ohm 10W resistor between terminals marked X1 and X2.
 - 6.2.1.2 Connect an O-scope, set at 1ms and 5V per div, across the 20-ohm resistor.

6.3 Testing Procedure

- 6.3.1 Apply power to card.
- 6.3.2 The signal on the O-scope will be a pulse train, which can be controlled by the firing box, 10V-15V peak to peak depending on the number of pulses in the pulse train. The more pulses the less voltage.
- 6.3.3 Repeat the procedure for circuit 2 using output terminals X3 and X4.

6.4 Component Testing

- 6.4.1 Component test the following points. Each will have 120K +/- 5%.
 - 6.4.1.1 X2 to LT1
 - 6.4.1.2 LT2 to X4
 - 6.4.1.3 X4 to LT3
 - 6.4.1.4 LT4 to NEG

6.5 ***TEST COMPLETE***

7. NOTES

- 7.1 None at this time

8. ATTACHMENTS

- 8.1 None at this time