| g GE Energy | **Functional Testing Specification** |
|---|---|
| ***Parts & Repair Services***<br>***Louisville, KY*** | **LOU-GED-IS200WDIIH1** |

**Test Procedure for an IS200WDIIH1ABB card.**

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

| REV. | DESCRIPTION | SIGNATURE | REV. DATE |
|---|---|---|---|
| A | Initial release | D. Waddy | 3/14/2013 |
| B | | | |
| C | | | |
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| PREPARED BY | REVIEWED BY | REVIEWED BY | QUALITY APPROVAL |
|---|---|---|---|
| D. Waddy | | | Charlie Wade |
| **DATE** | **DATE** | **DATE** | **DATE** |
| 3/14/2013 | | | 4/1/2013 |

## 1. SCOPE

**1.1** This is a functional testing procedure for a IS200WDIIH1ABB 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 | H033638 | Variac |
| | | |

## 6. Testing Process

### 6.1 Setup

**6.1.1** **DO NOT APPLY POWER TO UNIT AT THIS TIME**.

**6.1.2** Adjust variac to approx. 110VAC

Note: This test is intended for the WDIIH1 card. The H2, 3, and 4 groups may have different component values and additional circuitry which might require additional testing not provided in these procedures.

### 6.2 Testing Procedure

#### 6.2.1 Resistance Output Values

**6.2.1.1** With the multimeter set to measure resistance verify approx. 100 OHMs between the points provided below in Table 1. Tolerances are to be considered +/- 5% unless otherwise noted.

| From | To | From | To |
|---|---|---|---|
| JE1-1 | P1-Z2 | JE1-3 | P1-Z4 |
| JE1-1 | P1-B2 | JE1-3 | P1-B4 |
| JE1-1 | P1-D2 | JE1-3 | P1-D4 |
| JE1-1 | P1-Z6 | JE1-3 | P1-Z8 |
| JE1-1 | P1-B6 | JE1-3 | P1-B8 |
| JE1-1 | P1-D6 | JE1-3 | P1-D8 |
| JE1-1 | P1-Z10 | JE1-3 | P1-Z12 |
| JE1-1 | P1-B10 | JE1-3 | P1-B12 |
| JE1-1 | P1-D10 | JE1-3 | P1-D12 |
| JE1-1 | P1-Z14 | JE1-3 | P1-Z16 |
| JE1-1 | P1-B14 | JE1-3 | P1-B16 |
| JE1-1 | P1-D14 | JE1-3 | P1-D16 |
| JE1-1 | P1-Z18 | JE1-3 | P1-Z20 |
| JE1-1 | P1-B18 | JE1-3 | P1-B20 |
| JE1-1 | P1-D18 | JE1-3 | P1-D20 |
| JE1-1 | P1-Z22 | JE1-3 | P1-Z24 |

**Table 1**

**6.2.2 AC Voltage Output Values**

**6.2.2.1** With power to the variac in the off position connect JE1-1 to the positive lead and JE1-3 to the negative lead.

**6.2.2.2** Apply power to the card.

**6.2.2.3** With the multimeter set to measure AC voltage verify approx. 110VAC across the points provided below in table 2. Tolerances are to be considered +/- 5% unless otherwise noted.

| From | To |
|---|---|
| P1-Z2 | P1-Z4 |
| P1-B2 | P1-B4 |
| P1-D2 | P1-D4 |
| P1-Z6 | P1-Z8 |
| P1-B6 | P1-B8 |
| P1-D6 | P1-D8 |
| P1-Z10 | P1-Z12 |
| P1-B10 | P1-B12 |
| P1-D10 | P1-D12 |
| P1-Z14 | P1-Z16 |
| P1-B14 | P1-B16 |
| P1-D14 | P1-D16 |
| P1-Z18 | P1-Z20 |
| P1-B18 | P1-B20 |
| P1-D18 | P1-D20 |
| P1-Z22 | P1-Z24 |

**Table 1**

**6.2.3 Sensing Circuit**

**6.2.3.1** Set the multimeter to measure DC voltage and verify 0.7V across P1-Z32 and P1-D24. Tolerances are to be considered +/ 5% unless otherwise noted.

***6.3 ***TEST COMPLETE ******

**7. Notes**

**7.1** None at this time.