



GE Energy

Functional Testing Specification

Parts & Repair Services
Louisville, KY

LOU-GED-DS3800NTDL

Test Procedure for a NTDL card.

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

| REV. | DESCRIPTION | SIGNATURE | REV. DATE |
|------|-----------------|-----------|------------|
| A | Initial release | J. Hardin | 05/27/2011 |
| B | | | |
| C | | | |

© COPYRIGHT GENERAL ELECTRIC COMPANY

Hard copies are uncontrolled and are for reference only.

PROPRIETARY INFORMATION – THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF GENERAL ELECTRIC COMPANY AND MAY NOT BE USED OR DISCLOSED TO OTHERS, EXCEPT WITH THE WRITTEN PERMISSION OF GENERAL ELECTRIC COMPANY.

| | | | |
|---------------------------------|--------------------|--------------------|--|
| PREPARED BY J. Hardin | REVIEWED BY | REVIEWED BY | QUALITY APPROVAL <i>Charlie Wade</i> |
| DATE 05/27/2011 | DATE | DATE | DATE 5/27/2011 |

Functional test procedure for a Card

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 or cracked

4.2.1.2 Terminal strips / connectors broken or cracked

4.2.1.3 Loose wires

4.2.1.4 Components visually damaged

4.2.1.5 Capacitors leaking

4.2.1.6 Solder joints damaged or cold

4.2.1.7 Circuit board burned or de-laminated

4.2.1.8 Printed wire runs 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 85 DMM (or Equivalent) |
| 1 | | 120VAC Power cord for stab-ons |
| | | |

| | | |
|---|--|---------------------------|
| <p>LOU-GED-DS3800NTDL REV. A</p> | <p>g</p> <p>GE Energy Parts & Repair Services Louisville, KY</p> | <p>Page 3 of 3</p> |
|---|--|---------------------------|

6. TESTING PROCESS

6.1 Testing Procedure

6.1.1 Check resistors for the following values:

R1-R12 330K (+- 5%)

R13-R15 100ohm (+- 5%)

6.1.2 Check part number on diodes CR4-CR6 part#1N4934

6.1.3 Check stab-ons for cold solder joints.

6.1.4 Check diodes in forward and reverse bias.

6.1.5 Check all traces on back of board for continuity.

6.1.6 Connect power cord to the following points and apply 110VAC to check lamps:

TP1 to TP2--CR1 should come on

TP2 to TP3--CR2 should come on

TP3 to TP4--CR3 should come on

6.2 ***TEST COMPLETE***

7. NOTES

7.1 None at this time.