



GE Energy

## Functional Testing Specification

*Parts & Repair Operations  
Louisville, KY*

**LOU-GED-DS3800DECA**

### Test Procedure for a DS3800DECA.

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## 1. SCOPE

1.1 This is a functional testing procedure for a DS3800DECA 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		26-Pin Ribbon-Cable Breakout-Board

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## 6. TEST PROCESS

### 6.1 SETUP

- 6.1.1 Set the berg jumpers as indicated in 6.2.
- 6.1.2 BJ1 = 2CT, BJ2 = 2CT, BJ3 = NFLT, BJ4 = NFLT.
- 6.1.3 Connect DA to the breakout board.
- 6.1.4 Adjust **all** pots fully **counter-clockwise**.
- 6.1.5 Connect the meter's common to DA16.

### 6.2 TESTING

- 6.2.1 Measure **23.92K** (+- 5%) at **DA4**.
- 6.2.2 Verify that **DA3** decreases from **23.92K** (+- 5%) to **3.92K** (+- 5%) as you turn **R1** fully **clockwise**.
- 6.2.3 Measure **3.33K** (+- 5%) at **DA17**.
- 6.2.4 Verify that **DA12** increases from **1 ohm** to **3.33K** (5%) as you turn **R2** fully **clockwise**.
- 6.2.5 Verify that **DA15** increases from **1 ohm** to **3.33K** (+- 5%) as you turn **R7** fully **clockwise**.
- 6.2.6 Measure **30K** (+- 5%) at **DA7**.
- 6.2.7 Verify that **DA8** decreases from **30K** (+- 5%) to **10K** (+- 5%) as you turn **R3** fully (+- 5%).
- 6.2.8 Measure **14.75K** (+- 5%) at **DA10** and **TP12**.
- 6.2.9 Verify that **DA9** increases from **4.75K** (+- 5%) to **14.75K** (+- 5%) as you turn **R4** fully **clockwise**.
- 6.2.10 Disconnect the meter's common from **DA16** and reconnect it to **DA20**.
- 6.2.11 Measure **24.32K** (+- 5%) at **DA17**.
- 6.2.12 Measure **1K** (+- 5%) at **TP14**.
- 6.2.13 Verify that **DA13** increases from **1K** (+- 5%) to **21K** (+- 5%) as you turn **R5** fully **clockwise**.
- 6.2.14 Measure **1 ohm** at **DA11** and **DA14**.
- 6.2.15 Measure **1 ohm** between **DA2** and **DA5**.
- 6.2.16 Measure **1 ohm** between **DA1** and **DA6**.

## 7. NOTES

- 7.1 None at this time.

## 8. ATTACHMENTS

- 8.1 None at this time.