



GE Energy

## Functional Testing Specification

*Parts & Repair Services  
Louisville, KY*

**LOU-GED-DS3800NPSR**

### Test Procedure for an DS3800NPSR card

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


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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

3.1.2 Referenced DS3800NPSR-9AA sheet

## 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

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## 6. TESTING PROCESS

### 6.1 Setup

- 6.1.1** Connect 28VDC Power Supply (Pos+) to PA75. Ground or common (-) should be connected to PA1, PA43, & PA79.

### 6.2 Testing Procedure

- 6.2.1** Apply power to unit.
- 6.2.2** Verify +5.00 +/- .05VDC from PA12 to PA60.
- 6.2.3** Connect a 10-ohm 10W load resistor from PA12 to PA60.
- 6.2.4** Verify +5.00 +/- 0.25VDC from PA12 to PA60.
- 6.2.5** The "OK" LED should be on at this time and PA54 should be + 0.3 +/- 0.3VDC.
- 6.2.6** Reduce the power supply until PA56 is between 3.9 and 4.0 VDC. At this point, the power supply should be +18.5 +/- 1VDC.
- 6.2.7** Verify the LED is off and PA54 reads +3.5 +/- 0.5VDC.

### 6.3 **\*\*\*TEST COMPLETE\*\*\***

## 7. NOTES

- 7.1** None at this time?

## 8. ATTACHMENTS

- 8.1** None at this time?