



GE Energy Management

Functional Testing Specification

*Industrial Repair Services
Louisville, KY*

LOU-GED-DS3800HPTD

Test Procedure for a

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DATE 8/14/2017	DATE	DATE	DATE 8/14/2017

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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		28V DC POWER SUPPLY
1		CUSTOM FIRING BOX

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6. Modifications/Upgrades

6.1 Fill out if applicable.

7. Testing Process

7.1 Setup

7.1.1 Connect +28v DC power supply to JA3(+) and JA1(-).

7.1.2 Connect the firing box, NEG non-isolated signal to JA4 and com to JA1.

7.1.3 Connect a 10 ohm, 2w load resistor from JB1 to JB2.



Note:

7.2 Testing Procedure

7.2.1 Turn on firing box and apply signal.

7.2.2 Verify red LED CR6 illuminates.

7.2.3 Verify 22v from JB1 to JB2.

7.2.4 Verify resistance from TP5 to JE3 = 810k ohm +/- 41k

7.2.5 Verify resistance from TP4 to JD4 = 540k ohm +/- 54k

7.2.6 Verify resistance from TP3 to JD4 = 780k ohm +/- 78k

7.2.7 Verify resistance from TP2 to JC1 = 780k ohm +/- 78k

7.2.8 Verify R31, R32, R33, R34, R35, & R36 = 249K ohms +/- 1%

7.2.9 Verify R14, R15, R16, R17, R18, & R19 = 249K ohms +/- 1%

7.3 Post Testing Burn-in

Required ☐ Yes ☐ No



Note: All MARK I, II, & III Turbine related cards require a post testing burn-in of 100 hours.

7.3.1 Apply BUS or Operational power to the card for a period of 100 hours.

7.3.2 Re-test card while warm using the above procedure.

7.4 *****TEST COMPLETE*****

8. Notes

8.1 None at this time?

9. Attachments

9.1 None at this time?