g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-DS200TBQAG1**

Test Procedure for a DS200TBQAG1 terminal board

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	G. Chandler	12/16/2013
B	Clarified step 6.1.7, All three test points (Pin 1 of JAR, JAS and JAT) shall be within 1% of each other.	S. Cash	12/30/2013
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
G. Chandler	S. Cash		Charlie Wade
DATE	**DATE**	**DATE**	**DATE**
12/16/2013	12/30/2013		12/16/2013

1. SCOPE

1.1 This is a functional testing procedure for a terminal board.

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
2		Fluke 87 DMM (or Equivalent)
2		15VDC Power Supplies
1		Soldering Iron
1		Freeze Spray

6. TESTING PROCESS

6.1 Testing Procedure

6.1.1 Apply + 5Vdc (+/-10mv) to pins JAR-33, JAS-33 and JAT-33.

6.1.2 Apply -5Vdc (+/-10mv) to pins JAR-2, JAS-2 and JAT-2.

6.1.3 Connect commons to pin 34 of JAR, JAS and JAT.

6.1.4 It is important that you maintain the +/- 5Vdc power supply within the 10mv tolerance so the output can be within their tolerances.

6.1.5 Verify 25mvdc (+/-1mv) at pins TB1-1 through TB1-90. Odd pins are negative and even pins are positive.

6.1.6 Verify 25mvdc (+/-1mv) at pins 3 through 32 on connectors JAR, JAS, and JAT. Odd pins are negative and even pins are positive.

6.1.7 At room temp, verify pins 1 of JAR, JAS and JAT should be approx. -4.1Vdc, but all three points should be within 1% tolerance of one another. This will vary with room temp but all 3 pin 1s should be the same voltage within a few mv.

6.1.8 Apply a hot soldering iron to the center pin of each temp sensor IC (U1-U3) for a few seconds and monitor pin 2 of the corresponding IC. Pin 2 is not electrically connected to the IC but be careful not to get it to hot. The voltage at pin 2 of the corresponding connector should raise a few hundred mv after Appling heat.

6.1.9 Apply freeze spray to each IC and the voltage should lower a few hundred mv at pin 2 of the corresponding IC.

6.1.10 Normal repairs; Burn card in for 1 hour.

6.1.11 **All Revitalization Cards shall be burned-in for three (3) hours, check text box in SAP to determine if they fall into this category.**

6.1.12 Retest card after burn-in.

6.2 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time.

8. ATTACHMENTS

8.1 None at this time.