

g

GE Energy Services

Functional Testing Specification

*Inspection & Repair Services
Louisville, KY*

LOU-GED-531X196DFABxG1

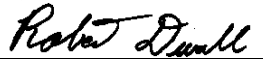
Test Procedure for a Digital Field Aux Card

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Frank Howard	7-21-2005
B			
C			

© COPYRIGHT GENERAL ELECTRIC COMPANY

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 Frank Howard	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL 
DATE 7-21-2005	DATE	DATE	DATE 7/22/05

LOU-GED-531X196DFABxG1 REV. A	g <i>GE Energy Services</i> <i>Inspection & Repair Services</i> <i>Louisville, KY</i>	Page 2 of 3
----------------------------------	---	-------------

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

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 the local documented procedures 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		+24VDC Supply
1		+15VDC Supply
1		-15VDC Supply
1	H188505	Fluke 5500A Calibrator

<p>LOU-GED-531X196DFABxG1 REV. A</p>	<p>g</p> <p>GE Energy Services <i>Inspection & Repair Services</i> Louisville, KY</p>	<p>Page 3 of 3</p>
--	---	--------------------

6. TESTING PROCESS

6.1 Setup

- 6.1.1 Connect +24V to DFTB-5, common to DFTB-6.
- 6.1.2 Connect +15V to DFTB-7, -15V to DFTB-9, common to DFTB-8.
- 6.1.3 All meter readings should use DFTB-8 as meter common.



Note:

6.2 Testing Procedure

- 6.2.1 Apply voltages and verify +13VDC across C8 and C9.
- 6.2.2 Short CFTB-1 and CFTB-2. Using P1, adjust for 0V at pin 3 of U3. DFTB-3 should also be at 0V.
- 6.2.3 Apply +100mV to CFTB-1(+) and CFTB-2(-). Verify +4V at DFTB-3. Adjust with GAIN pot P2 if necessary. Verify +8V at DFTB-4. Adjust with AMET pot P3 if necessary.
- 6.2.4 Remove jumpers JP1 through JP4. Using Fluke 5500A, input +702VDC to VGTB-1 (+) and VCTB-1(-). Verify +8V at DFTB-1.
- 6.2.5 Move +702V input to VMTB-1(+) and VCTB-2(-). Verify +8V at DFTB-2.

6.3 *****TEST COMPLETE*****

7. NOTES

8. Oscilloscope Verification Examples:

Fig. 1

Fig. 2