



GE Energy

Functional Testing Specification

Parts & Repair Services
Louisville, KY

LOU-GED 118D1323G0001

Test Procedure for a 118D1323G0001 Card

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Dan Laemmle	3/28/2007
B			
C			

© COPYRIGHT GENERAL ELECTRIC COMPANY

Hard copies are uncontrolled and are for reference only.

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
Paul Kelley

REVIEWED BY
Dan Laemmle

REVIEWED BY

QUALITY APPROVAL

Charlie Wade

DATE:
3/27/2007

DATE:
3/27/2007

DATE

DATE
3/29/2007

LOU-GED 118D1323G0001 REV. A	g GE Energy <i>Parts & Repair Services</i> <i>Louisville, KY</i>	Page 2 of 4
---------------------------------	--	-------------

1. SCOPE

1.1 This is a functional testing procedure for the 118D1323G0001 and G0002 Cards.

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 **P3K-AL-0467-A01 and other shop documentation on this card.**

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, 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)
4		0-30v Power Supplies

LOU-GED 118D1323G0001 REV. A	<div style="text-align: center;">  GE Energy Parts & Repair Services Louisville, KY </div>	Page 3 of 4
---------------------------------	---	-------------

6. TESTING PROCESS

6.1 Setup

6.1.1



Note:

6.2 Testing Procedure

- 6.2.1 Apply +22 volts to pin 37, -22 volts to Pin 41, commons to pin 39.
- 6.2.2 Connect up the circuit shown in Figure 1 and adjust its VR1 pot for +11.0 volts at its TP1 before connecting to Pin 13 of UUT.
- 6.2.3 Adjust board VR1 for +10.02 volts on TP4. With Pins 24 & 35 grounded to pin 39, output at Pin 13 = +10.0 volts.
- 6.2.4 Unground Pin24 and apply +0.2 volts. Pin 13 goes to +8.0 volts. Remove volts on Pin 24 and reground.
- 6.2.5 Unground pin 35 and apply +0.2 volts to it. Pin 13 goes to +8.0 volts. Increase volts on Pin 35 to +1.5 volts and VR2 should output at Pin 13 between approx. zero volts and + 1.7 volts. Set at +1.00 volts.
- 6.2.6 Put VR6 & VR7 at midrange. (Appox. 11 turns from either end) With a 1.3K resistor connected between Pins 36 & 34, adjust VR7 for +10.00 volts on Pin 36 and VR6 for 0.0 volts on Pin 34. It may be necessary to repeat the adjustments to get the desired volts.
- 6.2.7 With Pin 13 reading +1.0 volts, Short Pin 26 to Pin 25. Output at Pin 13 should go to +10.00 volts.

6.3 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.

- 6.3.1 Apply BUS or Operational power to the card for a period of 100 hours.
- 6.3.2 Re-test card while warm using the above procedure.

6.4 ***TEST COMPLETE***

7. NOTES

7.1

<p>LOU-GED 118D1323G0001 REV. A</p>	<p>g</p> <p>GE Energy <i>Parts & Repair Services</i> <i>Louisville, KY</i></p>	<p>Page 4 of 4</p>
---	--	---------------------------

8. ATTACHMENTS

8.1 Test circuit diagram (3K-AL-0467-A01_A_5)



P3K-AL-0467-A01_A
_5.tif