



GE Energy

Functional Testing Specification

Parts & Repair Services
Louisville, KY

LOU-GED-36C774345AE

Test Procedure for MFC Assembly

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	G. Chandler	1/18/2013
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 G. Chandler	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL <i>Charlie Wade</i>
DATE 1/18/2013	DATE	DATE	DATE 1/18/2013

LOU-GED-36C774345AE REV. A	g GE Energy Parts & Repair Services Louisville, KY	Page 2 of 3
-------------------------------	--	-------------

1. SCOPE

- 1.1 This is a functional testing procedure for a MFC Assembly

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 unit'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 85 DMM (or Equivalent)
1		3 phase 240VAC
1		Blue Load Cart
1		Oscilloscope
1		SCR Firing Box

<p>LOU-GED-36C774345AE REV. A</p>	<p>g</p> <p>GE Energy Parts & Repair Services Louisville, KY</p>	<p>Page 3 of 3</p>
---------------------------------------	--	--------------------

6. TESTING PROCESS

6.1 Setup and Test

- 6.1.1 Test SSBA card using the appropriate test procedure for that card.
- 6.1.2 Connect 3 phase 240VAC to AC input of unit. (do not apply power)
- 6.1.3 Connect big blue load cart at 41 ohms between A (pos) and B (neg) of the unit.
- 6.1.4 Connect SCR firing box "ISOLATED PULSES" to the unit, gate to connector on the SCR block accessed through hole in the circuit board and cathode to connector KF of the circuit board..
- 6.1.5 Connect an O-scope in the differential mode, set at 1V/div at 20ms across the load cart using X100 probes.
- 6.1.6 Connect a DVM on DC volts across the load cart.
- 6.1.7 Connect a DVM on AC volts across connector FPCL pins 1 and 2.
- 6.1.8 Apply power to unit.
- 6.1.9 Varying the SCR firing box, you will be able to control the output of the unit.
- 6.1.10 Verify approx. 0-155VDC across the load card with the varying of the firing box.
- 6.1.11 Verify the waveform on the scope at full on.
- 6.1.12 Verify approx. 36VAC across connector FCPL at full on.

6.2 ***TEST COMPLETE **

7. NOTES

- 7.1 None at this time.

8. ATTACHMENTS

- 8.1 None at this time.