g		GE Energy		Function	al Testing Sp	ecification		
	Parts & Repa	ir Services			LOU-GED-DC200	00		
	Louisville, KY				200 020 001000			
Test Procedure for a DC2000 Drive								
	MENT REVISION STATUS	Determined by the last e	ntry in the "REV" a	nd "DATE" colum		DEV DATE		
REV.	Initial release	DESCRIPTION			SIGNATURE LFG	REV. DATE		
ζ	Illitiai lelease				LIG			
В								
С								
© 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 Lloyd F. Groves REVIEWED BY QUALITY APPROVAL								
DATE 5/5/20		DATE	DATE		DATE			

	g	
LOU-GED-DC2000	GE Energy	Page 2 of 6
REV. A	Parts & Repair Services	_
	Louisville, KY	

1. SCOPE

1.1 This is a functional testing procedure for a DC2000 Drive

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	H188817	"Amtrack" Load
1		Motor Control Panel/Variac
1		Clamp-on Ampmeter
1	H188947,.104X156CA016	Transformer box, CPT

LOU-GED-DC2000
REV. A

GE Energy
Parts & Repair Services
Louisville, KY

Page 3 of 6

6. <u>Testing Process</u>

6.1 Setup

- **6.1.1** All circuit cards should be tested individually and installed in completed unit.
- **6.1.2** Install 100amp shunt at DA1.
- **6.1.3** Determine incoming voltage from elementaries(180VAC), hook up incoming 3- phase voltage wires to L1, L2, and L3. *****DO NOT APPLY POWER*****
- **6.1.4** Hook up "Amtrak" load across DA1 and DA2.
- 6.1.5 Jumper out SCR connector plugs(inside of Load) **Door must be closed**
- **6.1.6** Turn Parallel/Series switch to Parallel(side of load)
- **6.1.7** Turn on Master power switch on GE SCR load station(top front of load)
- **6.1.8** Turn on fan switch(side of load)
- **6.1.9** Hook voltmeter across DA1 and DA2.
- **6.1.10** Hook clamp-on Ampmeter around one line of load.(DA1 or DA2).
- 6.1.11 Using transformer box and CPT, apply 40VAC to 2TB pins 33, 34, and 35(center tap)
- 6.1.12 Open Toobox software program at N:\FIELDTOOLS\abc123\GF2000
- 6.1.13 Using serial cable connect to 3TB on UUT
- 6.1.14 Using transformer box and CPT, apply 40VAC to 2TB pins 33, 34, and 35(center tap)
- **6.1.15** ******Apply power****** to Exciter, check for faults on display. Correct any faults before continuing.
- **6.1.16** If no faults, go online with UUT serially.
- **6.1.17** Go to View dropdown and select Terminal Mode.
- **6.1.18** In terminal mode you can manipulate the output by supplying digital inputs between zero and 16,000.
- **6.1.19** Type in `C346=0 output should be off.
- **6.1.20** Type in `C346=500 output should turn on, very low.
- **6.1.21** Type in `C346=2000 output should increase.
- **6.1.22** Type in `C346=4000 output should increase.
- **6.1.23** Continue increasing inputs by 2000 until current reaches 100 amps.
- **6.1.24** Type in `C346=0 output should be off.
- 6.1.25 Shut off Power, !!!!! unit has two power inputs L1-L3, and 2TB 33-35.

6.2 ***TEST COMPLETE ***

7. Notes

7.1 None at this time.

LOU-GED-DC2000

g

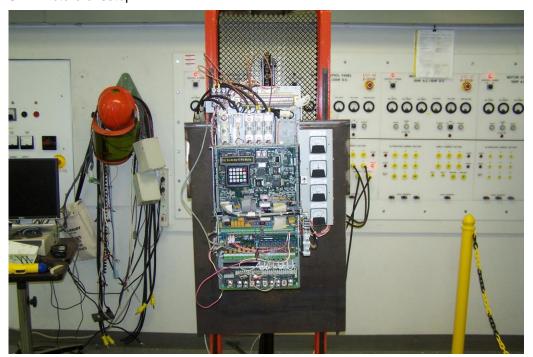
GE Energy Parts & Repair Services Louisville, KY

Page 4 of 6

8. Attachments

8.1 Picture of setup.

REV. A

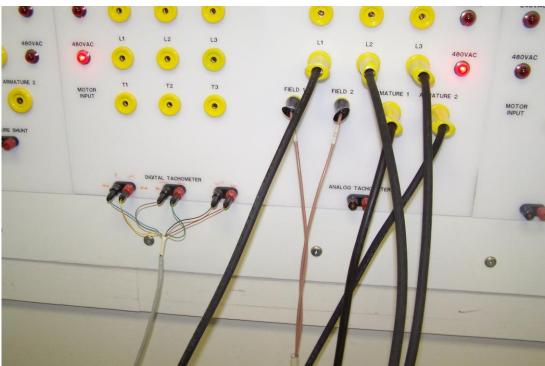


LOU-GED-DC2000 REV. A g

GE Energy Parts & Repair Services Louisville, KY

Page 5 of 6





LOU-GED-DC2000

REV. A

g

GE Energy Parts & Repair Services Louisville, KY Page 6 of 6



