g	GE Energy	Functional Testing Specification		
	Inspection & Repair Services Louisville, KY	LOU-GED-DS200PCCAG5		
	Test Procedure for a DS200PCCAG5	power connect card		
	MENT REVISION STATUS: Determined by the last entry in the "REV" a		DEV DATE	
REV.	Initial Release	SIGNATURE K. Greenwell	10/13/08	
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В	Change transformer Part# to 323A2335P2 in 6.1.1 & 6.1.2	L. Groves	7/18/2011	
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REVIEWED BY

DATE

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LOU-GED-DS200PCCAG5
REV. B

GE Energy
Parts & Repair Services
Louisville, KY

Page 2 of 5

Functional test procedure for a DS2000 Power Connect Card.

1. SCOPE

1.1 This is a functional testing procedure for a DS200PCCAG5 power connect 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 GEK85769A or GEJ7301

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 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		100 Ohm Resistor
1		SCR firing box
1		O-Scope
1		BNC to Banana jack adapter
1		24Vdc power supply

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LOU-GED-DS200PCCAG5 REV. B

GE Energy Parts & Repair Services Louisville, KY

Page 3 of 5

6. TESTING PROCESS

- 6.1 Visual Test
 - **6.1.1** Verify that T1F through T6F are part number 323A2335P2.
 - **6.1.2** Verify that T1R through T6R are part number 323A2335P2.
 - **6.1.3** Verify that R1, R3, R5, R7, R9 and R11 are 15-OHM 5W resistors.
 - **6.1.4** Verify that R13, R15, R17, R19, R21, and R23 are 15-OHM 5W resistors.
 - 6.1.5
- **6.2** Pulse Circuit Test
 - **6.2.1** Connect 5PL22 to positive output of 24V dc power supply.
 - **6.2.2** Connect 5PL1 to NEGATIVE non-isolated connection on SCR firing box.
 - **6.2.3** Connect negative output of 24V dc power supply to COM on non-isolated side of SCR firing box.
 - **6.2.4** Connect Scope to 6FPL (Common to pin 1 and Signal to pin 2).
 - **6.2.5** Set scope Vertical to 5 V/div and Horizontal to .2 mSec/div.
 - **6.2.6** Verify SCR firing box is set to NORMAL and apply power.
 - **6.2.7** Turn output to max and verify loaded output signal is above 10Vpp and remains steady throughout adjustment range of SCR firing box. See Figure 2 next page. Removing 100-ohm load on scope leads should allow output to increase to above 15Vpp.

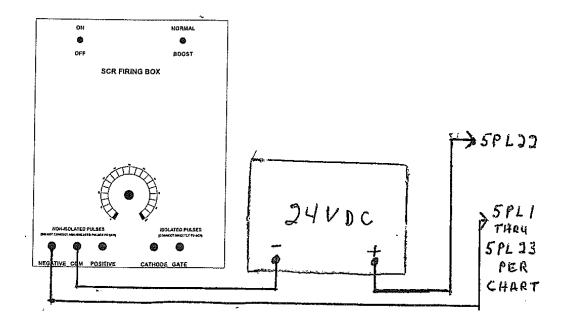
LOU-GED-DS200PCCAG5
REV. B

GE Energy
Parts & Repair Services
Louis ville, KY

Page 4 of 5

6.2.8 Repeat this test for the remaining circuits using the information in table 1.

+ 24 VDC	SCR Box -	Scope +	Scope -
	Firing pulse		
5PL22	5PL1	6FPL2	6FPL1
5PL22	5PL3	5FPL2	5FPL1
5PL22	5PL5	4FPL2	4FPL1
5PL22	5PL7	3FPL2	3FPL1
5PL22	5PL9	2FPL2	2FPL1
5PL22	5PL11	1FPL2	1FPL1
5PL22	5PL13	1RPL2	1RPL1
5PL22	5PL15	2RPL2	2RPL1
5PL22	5PL17	3RPL2	3RPL1
5PL22	5PL19	4RPL2	4RPL1
5PL22	5PL21	5RPL2	5RPL1
5PL22	5PL23	6PRL2	6RPL1
	5PL22 5PL22 5PL22 5PL22 5PL22 5PL22 5PL22 5PL22 5PL22 5PL22 5PL22 5PL22	Firing pulse 5PL22 5PL1 5PL22 5PL3 5PL22 5PL5 5PL22 5PL7 5PL22 5PL9 5PL22 5PL11 5PL22 5PL13 5PL22 5PL15 5PL22 5PL15 5PL22 5PL15 5PL22 5PL17 5PL22 5PL19 5PL22 5PL21	Firing pulse 5PL22 5PL1 6FPL2 5PL22 5PL3 5FPL2 5PL22 5PL5 4FPL2 5PL22 5PL7 3FPL2 5PL22 5PL9 2FPL2 5PL22 5PL11 1FPL2 5PL22 5PL13 1RPL2 5PL22 5PL15 2RPL2 5PL22 5PL17 3RPL2 5PL22 5PL17 3RPL2 5PL22 5PL19 4RPL2 5PL22 5PL21 5RPL2



6.3 ***TEST COMPLETE ***

LOU-GED-DS200PCCAG5
REV. B

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Page 5 of 5

7. NOTES

Figure 2

