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GE Industrial Systems

Functional Testing Specification

Renewal Services
Louisville, KY

LOU-GED-44C331881

Test Procedure for a 44C331881G01 Static Volt Adjust Card

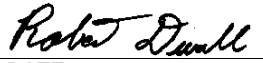
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DATE 10/23/02	DATE	DATE	DATE 10/24/02

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Functional test procedure for 44C331881G01

1. SCOPE

1.1 This is a functional testing procedure for a 44C331881G01 Static Volt Adjust 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 **Factory Procedure 277A3806**

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 equiv.
5		Adjustable Power supplies
1		10K ½ w resistor

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6. TESTING PROCESS

6.1 Setup

6.1.1

6.2 Testing Procedure

- 6.2.1** Apply +15VDC to pin 1 (com to Pin 3), –15VDC to Pin 5 (com to Pin 3), and +24VDC to pin 8 (com to Pin 9).
- 6.2.2** Measure the DC voltage at the cathode of 9D diode. This shall be 11.0 to 12.0 VDC.
- 6.2.3** Jumper +24VDC to Pin 18. Connect Pin 11 to +24VDC and LOWER lamp energizes. Remove voltage at Pin 11 and lamp de-energizes. Connect Pin 13 to +24VDC and RAISE lamp energizes. Remove voltage at Pin 13 and lamp de-energizes.
- 6.2.4** Remove +24VDC from Pin 18 and connect +24VDC to Pin 15. Connect Pin 17 to +24VDC and LOWER lamp energizes. Remove voltage at Pin 17 and lamp de-energizes. Connect +24VDC to Pin 16 and RAISE lamp energizes. Remove voltage from pin 16 and lamp de-energizes. Connect +24VDC to Pin 11. LOWER lamp shall not energize. Disconnect Pin 11 and connect Pin 13 to + 24VDC. RAISE lamp shall not energize.
- 6.2.5** Disconnect Pin 15 from + 24VDC. Connect +24VDC to Pin 17. LOWER lamp shall not energize. Disconnect Pin 17 and connect Pin 16 to +24VDC. RAISE lamp shall not energize. Disconnect Pin 16.
- 6.2.6** Connect +15VDC through a 10K resistor to Pin 20. LOWER lamp shall not energize. Disconnect Pin 20. Connect +15VDC through a 10K resistor to Pin 30. RAISE lamp shall not energize. Disconnect Pin 30.
- 6.2.7** Connect +24VDC to Pin 15. Connect +15VDC through a 10K resistor to Pin 20. LOWER lamp energizes. Disconnect Pin 20 and lamp de-energizes. Connect +15VDC through a 10K resistor to Pin 30. RAISE lamp energizes. Disconnect Pin 30 and lamp de-energizes.
- 6.2.8** Disconnect Pin 15 and connect Pin 18 to +24VDC. Connect +10VDC to Pin 26 (com to Pin 3). Connect adjustable voltage supply + to Pin 28 (com to Pin 3). Connect +24VDC to Pin 15. LOWER lamp will energize. Adjust the DC supply connected to Pin 28 slowly above 10 volt. When voltage at Pin 28 is between

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10.00v and 10.02 v, the RAISE lamp will energize and the LOWER lamp will de-energize. Remove all power.

6.3 *TEST COMPLETE *****

7. NOTES