

g

GE Industrial Systems

Functional Testing Specification

*Renewal Services
Louisville, KY.*

GED-LOU-193X525XX

Test Procedure for: 193X525XX

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

| REV. | DESCRIPTION | SIGNATURE | REV. DATE |
|------|-----------------|--------------------------|-----------|
| A | Initial release | <i>Jeffrey D. Barton</i> | 08/15/02 |
| B | | | |
| C | | | |

© COPYRIGHT GENERAL ELECTRIC COMPANY

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 Jeffrey D. Barton | REVIEWED BY | REVIEWED BY | QUALITY APPROVAL <i>Robert D. Dwyer</i> |
| DATE 08/15/02 | DATE | DATE | DATE 09/03/02 |

| | | |
|---------------------|--|-------------|
| 193X525xx REV. A | g GE Industrial Systems <i>Renewal Services</i> <i>Louisville, KY</i> | Page 2 of 3 |
|---------------------|--|-------------|

Functional test procedure for: 193X525XXG0X

1. SCOPE

1.1 This is a functional testing procedure for a Valutrol Field Control 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

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 | | Valutrol Non-Regenerative Drive |
| 1 | | DMM |
| | | |

| | | |
|-----------------------------|---|--------------------|
| <p>193X525xx REV. A</p> | <p>g</p> <p>GE Industrial Systems Renewal Services Louisville, KY</p> | <p>Page 3 of 3</p> |
|-----------------------------|---|--------------------|

6. TESTING PROCESS

6.1 Setup

- 6.1.1 Replace 4.7uF cap (c125), and install NEGATIVE lead to COM trace. (Install cap opposite of designation on version AA cards.)
- 6.1.2 Re-label UTT as AB version.
- 6.1.3 Connect Jumper from YA-YB and YC-YD.

6.2 Testing Procedure

- 6.2.1 Install UUT in place of 193X532XXGOX card on Non-Regenerative Valutrol test system.
- 6.2.2 Connect Field Load Coil.
- 6.2.3 Connect 3 Phase AC to UUT Fuse Block.
- 6.2.4 Turn FLOSS Pot CCW.
- 6.2.5 Release E-Stop.
- 6.2.6 Toggle switch on Diag. Card to Static.
- 6.2.7 Verify LR and CFB at 0 Volts on MCC, (Main Control Card) with DMM.
- 6.2.8 Connect DMM to F1 and F2.
- 6.2.9 Verify approx. 150 VDC.
- 6.2.10 Turn FLOSS Pot on UUT fully CW.
- 6.2.11 Verify RTR on MCC goes out.
- 6.2.12 Return FLOSS Pot CCW.
- 6.2.13 Reset Valutrol by pressing RESET button.
- 6.2.14 Verify RTR illuminates.
- 6.2.15 Return toggle switch on Diag Card back to Neutral.
- 6.2.16 Press E-STOP to de-energize Valutrol Drive.
- 6.2.17 Remove UUT.
- 6.2.18 Install 193X532XXG0X back in original position with all connections connected.

6.3 *****TEST COMPLETE *****

7. NOTES: VERIFY 4.7UF IS INSTALLED WITH NEGATIVE LEAD TO COM TRACE AND RELABEL UNIT AS 193X525ABG0X.