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GE Industrial Systems

Functional Testing Specification

Renewal Services  
Louisville, KY.

LOU-GEF-IC600XX929

Test Procedure for: IC600XX929-A

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DATE 8-6-03	DATE	DATE	DATE 08-06-03

**Functional test procedure for: IC600XX929-A**

**1. SCOPE**

1.1 This is a functional testing procedure for a: Test Procedure.doc

**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.

2.1.1

**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		IC600XX929 FACE PLATE (SPECIAL)
1		0 – 130 VARIAC
1		AC DUMMY CORD
1		DMM

<p><b>TIIC600XX929.doc</b> <b>REV. A</b></p>	<p><b>g</b></p> <p><b>GE Industrial Systems</b> <i>Renewal Services</i> <i>Louisville, KY</i></p>	<p><b>Page 3 of 4</b></p>
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## **6. TESTING PROCESS**

### **6.1 Setup**

- 6.1.1** Turn OFF CPU3 Remote Rack.
- 6.1.2** Install UUT in CPU3 Remote Rack by removing installed 24 VDC Output Test card.
- 6.1.3** Install IC600XX929 Face Plate over UUT to be tested.
- 6.1.4** Turn On CPU3 Remote Rack.
- 6.1.5** Press Reset On CPU3 Remote Rack.
- 6.1.6** Connect AC Dummy Cord to AC posts on bridge of UUT Face Plate.
- 6.1.7** Plug Variac into AC source.
- 6.1.8** Verify Variac switch is in OFF position.
- 6.1.9** Set Variac to 0 VAC Output.
- 6.1.10** Plug AC Dummy Cord into Variac.

### **6.2 Testing Procedure**

- 6.2.1** Turn ON Variac.
- 6.2.2** Adjust Output of Variac to 65 VAC Output.
- 6.2.3** Verify output LEDS of UUT illuminating in test sequence.
- 6.2.4** Connect DMM across Output resistors and verify DC voltages.
- 6.2.5** If LEDS are illuminating in sequence, then turn Variac to FULL output (130VAC).
- 6.2.6** Connect DMM across Output resistors and verify DC voltages adjust with different Input DC Voltages.
- 6.2.7** Verify output LEDS of UUT illuminating in test sequence. Let test run for approx. 2 complete cycles, then return Variac output back to 65Vac output. (CAUTION: Resistors on Test Face Plate will Get Very HOT.)
- 6.2.8** Let UUT run for approx. 10 complete cycles.
- 6.2.9** Turn OFF Variac.
- 6.2.10** Turn OFF CPU3 Remote Rack.
- 6.2.11** Remove UUT Face Plate and pull out UUT.
- 6.2.12** Remove all fuses from UUT.
- 6.2.13** Install UUT back in test slot.
- 6.2.14** Replace UUT Face Plate back over UUT.
- 6.2.15** Turn CPU3 Remote Rack back ON.

<b>TIIC600XX929.doc</b> <b>REV. A</b>	 <b>GE Industrial Systems</b> Renewal Services Louisville, KY	<b>Page 4 of 4</b>
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**6.2.16** Verify all BF (Blown Fuse) LEDS are illuminated; indicating UUT fuses are in Blown condition.

**6.2.17** Remove UUT Face Plate and remove UUT.

**6.2.18** Replace original 24VDC test card back in original slot and install associated faceplate back in position.

**6.2.19** Turn ON CPU3 Remote Rack and Reset as needed.

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

7. **NOTES:** UUT also has (2) 1/8A Pico fuses installed by the transistor clusters, if a Pico fuse is blown then one or more transistors in that cluster is bad.