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GE Industrial Systems

Functional Testing Specification

*Renewal Services
Louisville, KY.*

LOU-GEF-IC600XX924-A

Test Procedure for: IC600XX924-A

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REV.	DESCRIPTION	SIGNATURE	REV. DATE
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DATE 8-21-03	DATE	DATE	DATE

Functional test procedure for: IC600XX924-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		IC600XX924 FACE PLATE (SPECIAL)
1		0 – 130 VARIAC
1		AC DUMMY CORD
1		DMM

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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 IC600XX924 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.

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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.