



GE Energy

## Functional Testing Specification

*Parts & Repair Operations  
Louisville, KY*

**LOU-GEF-IC600RACK-A**

### Test Procedure for Series Six Rack

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

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A	Initial release	Cristyn Edlin	10/06/08
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LOU-GEF-IC600RACK REV. A	<b>g</b>  <b>GE Energy</b> <i>Parts &amp; Repair Operations</i> <i>Louisville, KY</i>	Page 2 of 4
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## 1. SCOPE

1.1 This is a functional testing procedure for a Series Six I/O Rack.

## 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, cracked, or loosely connected

4.2.1.2 Terminal strips / connectors: broken or cracked

4.2.1.3 Components: visually damaged

4.2.1.4 Capacitors: bloated or leaking

4.2.1.5 Solder joints: damaged or cold


4.2.1.6 Circuit board: burned or de-laminated

4.2.1.7 Printed wire runs / Traces: 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 87 DMM (or Equivalent)
1		Screwdriver
1		Power Cable for Terminal Strip
1		Pair of Test Leads
1		Clip Lead

LOU-GEF-IC600RACK REV. A	  <b>GE Energy</b> <i>Parts &amp; Repair Operations</i> Louisville, KY	Page 3 of 4
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## 6. SETUP

- 6.1. Remove the back cover from the unit under test (UUT).
- 6.2. Set all DIP-switches in the backplane to their opened positions.

## 7. TEST PROCESS

- 7.1 Assess the locations of the buss voltage points that feed from the power supply. (If necessary, pull the power supply out from the front of the rack to trace the continuity of each buss.)
- 7.2 Connect the power cable to the front terminal strip of the power supply.
- 7.3 Turn on the power to the rack.
- 7.4 Measure for the appropriate voltages within the back of the rack.
- 7.5 If any voltage is missing, turn off power to the rack, remove the power supply and test unit independently from the rack. Refer to test procedure LOU-GEF-IC600PMxxx-A for the power supply. Otherwise, continue to step 7.6.
- 7.6 Turn off power to the rack and unplug the power cable.
- 7.7 Perform the following steps for each DIP within each individual slot. There should be no cards in the rack at this time.
  - 7.7.1 Connect one-multimeter lead to white ground wire and use the other end as a probe. Probe the backplane connector directly across from switch, which should correspond to its dipswitch.
  - 7.7.2 With switch 1 open you should measure a high resistance, close switch 1 and you should measure 1-ohm or less.
  - 7.7.3 With switch 2 open you should measure a high resistance, close switch 2 and you should measure 1-ohm or less.
  - 7.7.4 Ensure the rest of the switches in this slot operate the same way.
  - 7.7.5 Once done, move to next slot and repeat the process until all slots have been completed.
- 7.8 If any problems are found, proceed with repair.
- 7.9 If no problems are found, reinstall the back cover of the rack.
- 7.10 \*Test complete. \*

LOU-GEF-IC600RACK REV. A	 <b>GE Energy</b> <i>Parts &amp; Repair Operations</i> <i>Louisville, KY</i>	Page 4 of 4
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8. **NOTES**

8.1 None At this time

9. **ATTACHMENTS**

9.1 None At this time