



GE Energy

Functional Testing Specification

*Parts & Repair Services
Louisville, KY*

LOU-GED-IC3600TPSD1

Test Procedure for a IC3600TPSD1

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Functional test procedure for a IC3600TPSD1 Unregulated Power Supply.

1. SCOPE

1.1 This is a functional testing procedure for a IC3600TPSD1 Unregulated Power Supply.

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 **68A999165**

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
2		Fluke 85 DMM (or Equivalent)
1		IC3600 Breakout box
1		60VDC Power Supply

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6. TESTING PROCESS

6.1 Setup

6.1.1 Using the IC3600 breakout box connect the following.

6.1.1.1 Connect pin-9 to pin-33, pin-11 to pin-43, pin-19 to pin-37, and pin-21 to pin-45.

6.1.1.2 Connect pin-45 to pin-1 (common).

6.1.1.3 Connect pin-41 through a 1K ohm 2 watt resistor to pin-1 (common).

6.1.1.4 Connect pin-49 through a 1K ohm 2 watt resistor to pin-1 (common).

6.1.1.5 Connect 1st DVM, + to pin-35 and - to pin-1 (common).

6.1.1.6 Connect 2nd DVM, + to pin-41 and - to pin-1 (common)

6.2 Testing Procedure

6.2.1 Apply +60VDC, + to pin-3 and - to pin-1 (common).

6.2.2 DVM 1 should read +59.3VDC, +/- 3 VDC.

6.2.3 DVM 2 should read +57.3VDC, +/- 3 VDC.

6.2.4 Move the +60VDC to the following pins (one at a time) and you will have the same reading on the DVMs as before, pin-5, pin-7, pin-13, pin-15, and pin-17.

6.2.5 Remove power.

6.2.6 Move the connector at pin-45, which is connected to common and reconnect it to pin-33. Leave the other connector at pin-45 in place. Connect DVM 1 + to pin-47 and DVM 2 + to pin-49.

6.2.7 Apply a –60VDC to pin-3 and repeat steps 6.2.1 thru 6.2.4. DVM readings should be the same as before, only in the negative direction.

6.2.8 Remove power.

6.2.9 Disconnect all connections for unit under test.

6.2.10 Using an ohmmeter measure between pin-35 to pin-51 for 6.8K +/- 5% and between pin-47 to pin-51 for 6.8K ohms +/-5%.

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

7. NOTES

7.1 None at this time.