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GE Industrial Systems

**Functional Testing Specification**

*Renewal Services  
Louisville, KY*

**LOU-GED-IC3600TPSA**

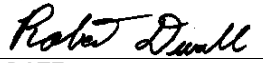
**Test Procedure for a IC3600TPSA1 Single Phase Power Supply**

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Dan Laemmle	9/13//02
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## Functional test procedure for IC3600TPSA1

### 1. SCOPE

1.1 This is a functional testing procedure for a IC3600TPSA1.

### 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 IC3600TPSA1 Documentation Folder**

### 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	H033788	Test Fixture
1	Oscilloscope	Tektronix 2215 or equiv.
1	DVM	Fluke 85 or equiv.

## 6. TESTING PROCESS

## 6.1 Setup

- 6.1.1** Replace TPSA Test card in fixture with UUT. Leave other cards in fixture.
- 6.1.2** Set switches on fixture as follows: SW1- open, SW2- POS1, SW3- open, SW4- RH1 POT, SW5- open, SW6- open, SW7- open, SW8- closed. Set variable transformer to 100%. Other pots don't matter.

## 6.2 Testing Procedure

- 6.2.1** Switch on fixture and connect DVM com to Pin 1 jack (black) and pos to  $-12\text{v}$  jack (red). Adjust R45 on card for  $-12.0\text{v}$ . Pot should be adjustable above and below  $-12\text{v}$  and remain stable at  $-12.0\text{ v}$ . Check at  $-16\text{v}$  and  $+16\text{v}$  jacks (blue) for approx  $-17.5\text{v}$  and  $+17.5\text{v}$ . These are unregulated raw DC.
- 6.2.2** With scope check for approx.  $15\text{Khz}$   $10\text{v}$  p-p square wave oscillator output at Pin 37 on card.
- 6.2.3** Check bias output at Pin 3 on card with DVM for approx.  $-1.5\text{vdc}$ . Connect a clip jumper from Pin 11 to Pin 13 on card. Pin 3 should go to approx.  $1.8\text{vdc}$ .
- 6.2.4** Switch off fixture and remove card. With ohmmeter check for  $2.7\text{ ohms}$  between Pins 31 and 49 and Pins 39 and 41.

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

## 7. NOTES

