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GE Industrial Systems

Functional Testing Specification

*Renewal Services
Louisville, KY.*

LOU-GED-VALUTROL

Test Procedure for: Valutrol Drive

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
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DATE 12/09/2002	DATE	DATE	DATE 12/17/2002

Functional test procedure for: Test Procedure.doc

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		Digital Volt Meter
1		Oscilloscope w/ Probe
1		Inductive Load Cart
1		Motor (matching UUT specifications)

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6. TESTING PROCESS

6.1 Setup

6.1.1 Order all documentation that will be needed, if not already available.

6.1.2 **Take notes on specific setups of all individual cards jumper settings.**

6.2 Testing Procedure

6.2.1 Remove each card listed and test individually using its Test Procedure matching each Model # on card.

6.2.1.1 Power Supply

6.2.1.2 Field Control Card

6.2.1.3 Interface Card

6.2.1.4 Main Control Card

6.2.1.5 Diagnostic Control Card

6.2.2 **Return any moved jumpers to their original position per notes of Setup 6.1.1.**

6.2.3 Verify SCR's on Power Module, replace any that fail with equivalent.

6.2.4 Inspect all wiring and terminal blocks in UUT's case for damage or corrosion, replace as needed.

6.2.5 Remove and repair all accessory cards per individual Test Procedures. (If applicable.)

6.2.6 Verify all Circuit breakers, fuses, shunts in good working condition.

6.2.7 Install all removed cards and verify all connections needed for each.

6.2.8 Connect UUT to Inductive Load's and or Motor per UUT's specs. Verify proper SCR firing operation of completed unit by Oscilloscope.

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

7. NOTES:

If UUT needs to be washed; (particularly the case and wiring); it is recommended that it remain in the oven for at least 36hrs. (RT1 – RT3 - resistor networks) and Power Transformer needs to be completely dried before UUT operation; Damage or erratic operation will occur if moisture is present!

8. Oscilloscope Verification Examples:

Fig. 1

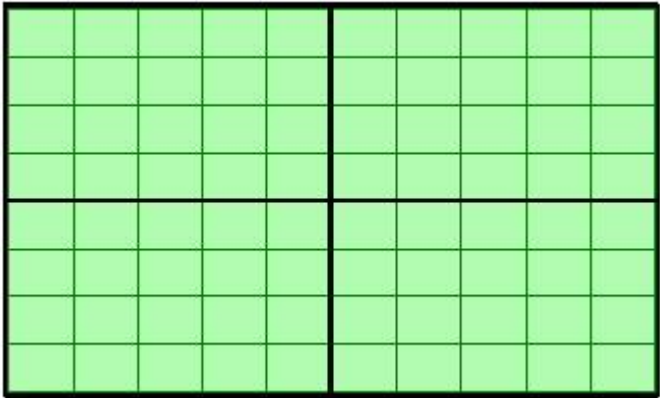


Fig. 2

