g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY.***	**LOU-GED-SIEI**

Test Procedure for a AV, DV, and AVi Drives

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	D. Bush	7/23/2002
B	Added switch box, asset number, changed header	*Barry S Cash* C. Wade	9/22/2008
C			

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DATE	**DATE**	**DATE**	**DATE**
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Functional test procedure for all GE\SIEI America Drives

1. SCOPE

1.1 This is a functional testing procedure for aa AV-DV-Avi drives

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 GEI-100211

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		Motor control Panel
1		Fluke 85 DMM (or equivalent)
1	H188622	I\O switch box

6. TESTING PROCESS

6.1 Setup

6.1.1 Reference all shop manuals on the *SIEI America* Drives.

6.2 Testing Procedure

6.2.1 Wire incoming AC power to drive connections L1 L2 and L3.

6.2.2 Wire in AC motor to connections U V and W on the Drive.

6.2.3 Wire in DC motor to connections C, D and field.

6.2.4 Apply proper input voltage.

6.2.5 Verify the Drive is powered up.

6.2.6 With a DMM check for proper AC voltage across the three phase incoming power at L1, L2, and L3.

6.2.7 With a DMM check for voltage at the motor connections U, V, and W.

6.2.8 Using toolbox load drive with default settings and then run setup wizard to match setting to motor in use.

6.2.9 It may be necessary to self-tune drive to motor in use.

6.2.10 Connect appropriate I\O switch box. Use instruction manual to determine I\O and option setup using toolbox again. Test I\O points.

6.2.11 Verify drive operations using functions using controls on I\O box.

6.2.12 Reload drive with default setting and be sure to save.

6.2.13 Disconnect all power.

6.3 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time