g GE Industrial Systems *Renewal Services* *Louisville,KY*	**Functional Testing Specification** **LOU-GED-DS3820HSMx**

Test Procedure for a DS3820HSMX Heat Sink Assembly

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	David Bush	27July 02
B	Added special note in section 7	Charlie Wade	10/9/2007
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
David Bush			Charlie Wade
DATE	**DATE**	**DATE**	**DATE**
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Functional test procedure for DS3820HSMX Heat Sink Assembly

1. SCOPE

1.1 This is a functional testing procedure for a.

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 Refer to shop folder for DS3820HSM.

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		Fluke 85 DMM (or Equivalent)
1		Shop SCR Firing Box
1	Cap#H188547	Light bulb Load

6. TESTING PROCESS

6.1 Setup

6.1.1 Using shop SCR Firing Box, hook-up leads from the Isolated Pulses of the Firing Box to corresponding Cathode and Gate connections of the SCR on the Heat Sink Assembly.

6.1.2 Hook the Red and Black wire plugs on the Light bulb box the proper connections across the SCR to be fired.

6.2 Testing Procedure

6.2.1 After completing Set-up, turn ON SCR Firing Box and Light bulb Load Box.

6.2.2 Turn the knob on the SCR Firing Box from 0 thru 100(entire range). The light bulb Load should light.

6.2.3 Verify a smooth and even transition from OFF to fully ON.

6.2.4 Repeat above steps for all other SCR's on the particular Heat Sink Assembly.

6.3 ***TEST COMPLETE ***

7. NOTES

SPECIAL NOTE from QC: We have experienced a number of units with bad contacts; unless they are in good shape, replace all contacts in Molex connectors. This will be checked at the QA station and if questionable, unit will be returned for rework.

8. Oscilloscope Verification Examples:

Fig. 1