

ABB

Functional Testing Specification

Parts & Repair Services
Louisville, KY

LOU-GED-DS3800HPTR

Test Procedure for a

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	JOHN WYCHULIS	8OCT20
B			
C			

PREPARED BY
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REVIEWED BY

REVIEWED BY

QUALITY APPROVAL

DATE
8OCT20

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1. SCOPE

1.1 This is a functional testing procedure for a Card.

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 Check board's electronic folder for more information

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 site specific SRA's 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, cracked, or loosely connected

4.2.1.2 Terminal strips / connectors - broken or cracked

4.2.1.3 Components - visually damaged

4.2.1.4 Capacitors - bloated or leaking

4.2.1.5 Solder joints - damaged or cold

4.2.1.6 Circuit board - burned or de-laminated

4.2.1.7 Printed wire runs / Traces - 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 87 DMM (or Equivalent)
1		O-SCOPE
1		70 VDC SUPPLY
1		28 VDC SUPPLY
1		SCR FIRING BOX

6. **Modifications/Upgrades**

6.1 Fill out if applicable.

7. **Testing Process**

7.1 **Setup**

- 7.1.1 Tie JA2 and JA9 together
- 7.1.2 70 VDC to JA1 JA9 Com
- 7.1.3 28 VDC to JA7 JA9 Com
- 7.1.4 NEG of SCR Box to JA8 COM to JA2
- 7.1.5 Voltmeter to JA11 Com to JA2



Note:

7.2 **Testing Procedure**

- 7.2.1 Turn on power supplies
- 7.2.2 Turn the 70 V down below 64 V and at around 62 V the meter will read 28V. Turn the power back up to 70V and the meter will read zero
- 7.2.3 Put a 10 ohm 10 watt non inductive load across JB1 JB2 and scope these points
- 7.2.4 Turn up the SCR Box pulse train and check for pulse train on the scope and CR9 LED is on. Return to zero.
- 7.2.5 Move SCR Box NEG to JA10. Move load to JC1 JC3. Turn the pulse train up and use the scope to see pulse train at JC1 JC3. CR10 LED is on. Turn back to zero.

7.3 *****TEST COMPLETE *****

8. **Notes**

8.1 None

9. **Attachments**

9.1 None
