g GE Industrial Systems	**Functional Testing Specification**
Renewal Services ***Louisville, KY***	**LOU–GED-193X271xx**

Test Procedure for a Card 193X271AxG02

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	S. Pharris	4/18/03
B	Updated and verified test	J. Madden	2/24/04
C			

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DATE	**DATE**	**DATE**	**DATE**
04/18/2003	02/24/04		4/23/03

Functional test procedure for 193X271AxG02

1. SCOPE

1.1 This is a functional testing procedure for a 193X271AxG02.

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 36B600728

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 DMM or equivalent
1		Standard connector box for 193X
4		500 ohm resistors
1		Center tap transformer
1		Variable transformer

6. TESTING PROCESS

6.1 Setup

6.1.1 Insert UUT into connector box.

6.1.2 Some further setup required at step 6.2.7, but not before then. Proceed with Test Procedure.

6.2 Testing Procedure

6.2.1 Verify continuity between each of the following pairs of pins: 12X to 10X, 3X to 6X, 18 to 19, 24 to 25, 15 to 16, 5 to 6, 29 to 30, 27 to 28, 22 to 21, 11 to 12; and within the following groups of pins: 30X, 29X, 28X, 27X, 26X; and 20X, 19X, 18X, 17X, 16X.

6.2.2 Apply 115VAC to pins 18 and 24.

6.2.3 Verify LED on card is illuminated.

6.2.4 Verify 105VDC between pins 30X and 16X.

6.2.5 Verify continuity between pins 8X to 12X and pins 3 to 3X with unit powered up.

6.2.6 Remove 115VAC input voltage. You will not be using it any further.

6.2.7 Connect 500-ohm resistors across the following pins: 27 to 30 & 28 to 30 (this loads the +48VDC regulator circuit. Note that it must be routed to the –30VDC output [pin 30] to reach full potential); and from 30 to 15, & 5 to 15 (which loads the unregulated +/- 30VDC outputs).

6.2.8 Apply 26VAC between pins 12 and 14 (center tap of transformer to pin 14). Apply 26VAC between pins 22 and 14 (center tap of transformer to pin 14). You should now have a total of 52VAC going in to UUT across pins 12 to 22, with pin 14 being the center tap.

6.2.9 Connect common from meter to pin 30 and measure output at pins 27 & 28. They should each be reading approximately +48 VDC.

6.2.10 Connect common from meter to pin 15 and measure pin 30. It should be reading approximately –30VDC. Measure pin 5. It should be reading approximately +30VDC.

6.3 ***TEST COMPLETE ***

7. NOTES