

GE Power Generation Engineering

PROCESS SPECIFICATION

Materials and Processes Engineering Schenectady, NY 12345 P3K-AL-0134-A01

INSTRUCTIONS FOR TESTING COMBINED MAX-FLOW LIMIT CIRCUIT BOARD

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PREPARED BY:

ORIG. ISSUE DATE:

P.R. BUDKA

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TITLE

INSTRUCTIONS FOR TESTING COMBINED MAX-FLOW LIMIT CIRCUIT BOARD

FIRST MADE FOR 947D374 G-5

REVISIONS

SCOPE

This instruction provides a method for performing a functional check with the necessary adjustments for the subject circuit board prior to the installation in the EHC Cabinet. Rl will require further trimming when the circuit board is installed in the EHC Cabinet.

TEST PROCEDURE

- 1. Examine the circuit board to see that the electrical components are printed circuit board are not physically damaged.
- 2. Plug in circuit board no. 947D374 G-5 into the test fixture.
- 3. Use an Ohm-Meter to check that there are no shorts between any combinations of pins 19, 21, 38 and 40.
- 4. Connect resistors between pins as follows:
 - 1.8K 1 watt between pins 38 and 23
 - 1.8K 1 watt between pins 38 and 5
 - 2.2K 1 watt between pins 23 and 19
 - 7.25K 1 watt between pins 5 and 19
- 5. Connect an adjustable 5.0K Ohm Potentiometer between pins 22 and 19. The slider connected to pin 7. Connect the Potentiometer electrically such that the slider is shorted to pin 22. When the Potentiometer is in the full clockwise position. This Potentiometer will be referred to as RA.
- 6. Connect the input of a high gain DC Op-Amp to pin 13 and output to pin 31.
- 7. Connect the input of a second high gain DC Op-Amp to pin 3 and output to pin 1.
- 8. Connect a HQ +30.0 volt DC power supply to pin 38. The negative to pin 19.
- 9. Connect a HQ -22.0 volt DC power supply to pins 21 and 40. The positive to pin 19.
- 10. All voltage measurements will be made with respect to test point TP11.
- 11. Turn RA to its full counterclockwise position.
- 12. Connect TP2 to ground. The voltage at pin 5 should be between +2.4 and +2.6 volts. The voltage at pin 23 should be between -0.1 and +0.1 volts.

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947D374 G-5

REVISIONS

TEST PROCEDURE (continued)

- 13. Remove the 1.8K resistor between pins 38 and 5. The voltage at pin 23 should be greater than +5.0 volts.
- 14. Replace the 1.87K resistor between pins 38 and 5.
- 15. Remove the signal ground from TP2.
- Set RA for -0.625 volts as measured at TP2. The voltage at pin 5 should be between +3.35V and 3.65 volts. The voltage at pin 23 should be between -0.1 and +0.1 volts.
- Turn RA to the full clockwise position.
- 18. Adjust Rl for -5.02 volts at TP2.
- 19. Remove all test equipment and board from test fixture.

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