

GENERAL  ELECTRIC

2 7 7 A 3 7 9 2

REV NO.	TITLE	CONT ON SHEET 2	SH NO. 1
2 7 7 A 3 7 9 2	Test Specifications		
CONT ON SHEET 2	SH NO. 1	FIRST MADE FOR	44C331837

REVISIONS

STANDING INSTRUCTIONS

FOR

IMPEDANCE COMPENSATOR

PRINTED CIRCUIT BOARD

FOR

GENERREX SYSTEM

44C331837

Distribution:

- 1 QC Eng.
- 1 Test Area
- 1 Engineering

3EL1

4QA1

1RA2

4EK1

DL13

PRINTS TO

MADE BY RK Gerlitz 790109	APPROVALS <i>J.R. Parnen</i> 11/10/79	Drive Systems	DIV OR DEPT.	2 7 7 A 3 7 9 2
ISSUED 1-12-79		Salem, VA USA	LOCATION	CONT ON SHEET 2 SH NO. 1

CONT ON SHEET 3 SH NO. 2

CODE IDENT NO.

# GENERAL ELECTRIC

2 7 7 A 3 7 9 2

REV NO. <div style="text-align: center; font-weight: bold;">2 7 7 A 3 7 9 2</div> CONT ON SHEET 4 SH NO. 3	TITLE <div style="text-align: center;">Test Specifications</div> FIRST MADE FOR 44C331837
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## IV. Setup

- A. Turn all switches to OFF or normal on both the UT and UPS.
- B. Turn all power supplies to zero on the UT and all variacs to zero on the UPS.
- C. Apply power to test stand.
- D. Install board under test to adaptor.

## V. Electrical Test

- A. Remove LDC-DROOP jumper on Printed Circuit Board (PCB).  
*MAIN 24 VOLTS NOT USED ON CARD ONLY ON FACTORY PLATE*
- B. Close "SW-1" and "SW-34". Depress "LPB-1" and adjust PS-1 to  $24 \pm 0.5$  VDC at "BJ-1".  
 NOTE: Should it become necessary to remove all power from the PCB, open "SW-1".

- C. Depress "LPB-2" and adjust PS-2 to  $15 \pm 0.1$  VDC at "BJ-1".  
*+15 to pin 1*
- D. Depress "LPB-3" and adjust PS-3 to  $15 \pm 0.1$  VDC at "BJ-1".  
*-15 to pin 5*
- E. Apply main power to Universal Power Supply (U.P.S.).
- F. On the U.P.S. close 3Ø Power SW, Depress PB-1 and PB-20 and adjust Ø Balance variac to  $17 \pm 0.17$  volts AC at L-N jacks.
- G. Close "SW-10" (applies 17 volts AC to pins 11-3). Place RS-2 to Pos. 4 (connects 10K resistor pin 23-4). Place "RS-1" to position 1. Readjust Ø1 Balance variac if necessary for  $17 \pm 0.1$  VAC at BJ-10.  
*METER 4 PIN 12 - PIN 4*
- H. Adjust 1P on the PCB completely CCW.
- I. Adjust 7P on the PCB from CCW to CW.

7P	$\frac{2.878}{2.69} \pm 0.1$ VAC
CCW	$2.69 \pm 0.1$ VAC
CW	$4.35 \pm 0.1$ VAC

- J. Adjust 7P on the PCB for  $-5 \pm 0.05$  Volts DC at 9TP.
- K. Adjust 8P on the PCB completely CCW.

8P	$\frac{3.75}{3.75} \pm 0.2$ VDC
CCW	$3.75 \pm 0.2$ VDC
C	$6.3 \pm 0.4$ VDC

### REVISIONS

7-2-02 *2*

3EL1

4QA1

1RA2

4EK1

DL13

PRINTS TO

MADE BY RK Gerlitz	APPROVALS <i>FR P...</i> 1/10/79	Drive Systems Salem, VA USA	DIV OR DEPT. LOCATION 2 7 7 A 3 7 9 2 CONT ON SHEET 4 SH NO. 3
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# GENERAL ELECTRIC

2 7 7 A 3 7 9 2

<div style="border: 1px solid black; padding: 2px;"> <div style="display: flex; justify-content: space-between;"> <div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;"> <div style="font-size: 8px;">REV NO.</div> <div style="text-align: center;">2 7 7 A 3 7 9 2</div> <div style="font-size: 8px;">CONT ON SHEET Fnl. SH NO. 4</div> </div> <div> <div style="border: 1px solid black; padding: 2px;"> <div style="font-size: 8px;">TITLE</div> <div style="text-align: center;">Test Specifications</div> <div style="font-size: 8px;">FIRST MADE FOR 44C331837</div> </div> </div> </div> </div></div>	<div style="border: 1px solid black; padding: 5px;"> <div style="text-align: right; font-size: 8px; margin-bottom: 5px;">2 7 7 A 3 7 9 2</div> <div style="text-align: right; font-size: 8px; margin-bottom: 5px;">CONT ON SHEET Fnl. SH NO. 4</div> <div style="border: 1px solid black; padding: 5px; min-height: 600px;"> <div style="text-align: center; font-size: 10px; margin-bottom: 10px;">8P</div> <div style="text-align: right; font-size: 10px; margin-bottom: 10px;">5TP</div> <div style="font-size: 10px;"> <p>I. Adjust 9P on the PCB for <math>0 \pm 0.02</math> VDC at 2TP. <span style="margin-left: 20px;">5TP=5.0 <math>\pm</math> 0.1 VDC</span></p> <p style="margin-left: 40px;">REMOVE 17V FROM PIN 11</p> <p>M. Open "SW-10" and turn <math>\phi 1</math> Balance variac to zero.</p> <p>N. Place "RS-1" to position 4. <span style="margin-left: 20px;">APPLY 17V TO PIN 13, 14</span></p> <p>O. Close SW-5 and increase <math>\phi 2</math> balance variac to <math>10 \pm 0.1</math> VAC at BJ-10. <span style="margin-left: 20px;">TO PIN 4</span></p> <p style="margin-left: 40px;">Make sure <math>\phi 1</math> Balance Variac is at zero. Jumper Pin 11 to Pin 3.</p> <p>P. Adjust 2P (R pot) completely CW and adjust 3P from CW to CCW. <span style="margin-left: 20px;">4 <math>\pm</math> 14</span></p> <p style="margin-left: 40px;">Voltage at 5TP shall go from <math>0.450 \pm 0.05</math> to <math>0.912 \pm 0.05</math> VDC.</p> <p>Q. Adjust 3P for <math>0.5 \pm 0.005</math> VDC at 5TP.</p> <p>R. Adjust 2P (R pot) completely CCW. Voltage at 5TP will go to <math>0 \pm 0.02</math> VDC.</p> <p>S. Connect jumper for LDC operation.</p> <p>T. Connect phase angle indicator ref. input to 6TP and Signal input to 3TP and adjust 4P for <math>45^\circ \pm 1^\circ</math> lag. (3TP lags 6TP).</p> <p>U. Connect phase angle indicator ref. input to 4TP and Signal input to 6TP. Adjust 5P for <math>90^\circ \pm 1^\circ</math> lag (6TP lags 4TP).</p> <p>V. Adjust 1P (X) completely CW, then adjust 6P for <math>1.25 \pm 0.01</math> volts D.C. at 5TP.</p> <p>W. Connect an oscilloscope channel 1 (trigger) to 6TP. Connect channel 2 to 10TP. Shall be <math>180 \pm 2^\circ</math> out of phase. Connect channel 2 to Droop Terminal. Shall be in phase with channel 1.</p> <p style="margin-left: 40px;">Remove jumper pin 11 to pin 3.</p> <p>X. Turn <math>\phi 2</math> Balance Variac to zero. Open "SW-5" and close "SW-10". <span style="margin-left: 20px;">APPLY 17V TO PIN 13, 14</span></p> <p style="margin-left: 40px;">Place "RS-1" to position 1. Adjust <math>\phi 2</math> Balance Variac to <math>17 \pm 0.1</math> VAC at "BJ-10". Place "RS-1" to Position 2. Adjust <math>\phi 3</math> variac to <math>10 \pm 1</math> VAC at BJ-10. <span style="margin-left: 20px;">PIN 14</span></p> <p>Y. Adjust Balance variac until 9TP reads <math>-5 \pm 0.05</math> VAC. The voltage at 5TP should be <math>5.15 \pm 0.1</math> VDC and BJ-12 shall be <math>-0.6 \pm 0.006</math> VDC <span style="margin-left: 20px;">VDC (1)</span></p> <p style="margin-left: 40px;">at 5TP should be <math>5.15 \pm 0.1</math> VDC and BJ-12 shall be <math>-0.6 \pm 0.006</math> VDC</p> <p>Z. Return all variacs to zero. Open or return to normal all switches on UPS and UT. Remove all instrumentation.</p> </div> </div> </div>
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MADE BY

RK Gerlitz 790109

ISSUED

1-12-79

APPROVALS

1/16/79

DIV OR DEPT.

Drive Systems

LOCATION

Salem, Va USA

2 7 7 A 3 7 9 2

CONT ON SHEET Fnl. SH NO. 4

FF-803 WF (11-77)  
PRINTED IN U.S.A.

CODE IDENT NO.

## REVISIONS

W.L.L. 3-1-79

3EL1  
4QA1  
1RA2  
4EK1  
DLI3

PRINTS TO