LOCAL STANDARD TEST PROCEDURE

LOUISVILLE

MODEL # IC3600SFCD1 REV 1

TABLE OF CONTENTS:

SECTION PAG	I Ε
1. INTRODUCTION AND DESCRIPTION	2
2. MEASUREMENT STANDARDS & EQUIPMENT REQUIREMENTS 3	3
3. PRELIMINARY OPERATIONS.& THEORY OF OPERATION 4	1
4. TESTING AND CALIBRATION PROCESS6	3
5. CHECKLIST / DATA SHEET	7
APPENDIX	
A. PARTS LISTING AT	1
B. ASSEMBLY DRAWING	1
C. ELEMENTARY DIAGRAM	<u>1</u>
D. FIRMWARE REVISION LISTING	1

Agosi wed By: Quality Assurance	Date	Supercedes	Page
LOVES Rober Duel	02/12/92		1 of 7

	LOCAL STANDARD TEST PROCEDURE	
LOUISVILLE	MODEL # IC3600SFCD1	REV 1

SECTION 1 -- INTRODUCTORY DESCRIPTION

AND PERFORMANCE REQUIREMENTS

1.1 This procedure establishes the methods for testing a IC3600SFCD1 Firing Circuit.

Hereinafter, the unit being tested will be referred to as the UUT (Unit Under Test).

UUT environmental ranges: Temp. 72 degrees +- 5%

RH 20-80 %

UUT warm-up/stabilization period requirements:

5 minutes

It is advised that the schematics or operational instructions be available for reference in conjuction with this procedure.

(A copy of the schematic or operating instructions is located in the libary)

Personnel using this procedure are expected to have a high degree of confidence and expertise in related testing and calibration procedures.

Procedures not explained here are considered to be understood as common practice.

RECSIEWED By: Quality Assurance	Date	Supercedes	Page
LOUES Rober Dull	02/12/92		2 of 7

	LOCAL STANDA TEST PROCEDURE	ARD
LOUISVILLE	MODEL # REV IC3600SFCD1 1	

SECTION 2 -- MEASUREMENT STANDARDS

AND EQUIPMENT REQUIREMENTS

2.1 All measurement standards used in this procedure shall be traceable and shall have the accuracy, stability, range and resolution required for the intended use. Unless otherwise specified; the collective uncertainty of the measurement standards shall not exceed 25 percent of the acceptable tolerance for each characteristic being calibrated. All deviations shall be documented.

2.2	+27 volt supply
	-27 volt supply
	0 - 1.5 volt supply
	220V Isolated AC Supply
	16V Isolated AC Supply
	Oscilliscope (isolated)
	SK3582 SCR
	220 walt load (light hulb)

RGF6S ewed By: Quality Assurance	Date	Supercedes	Page
LOUES Roba Dwall	02/12/92		3 of 7

LOCAL STANDA TEST PROCEDURE	ARD .
MODEL # IC3600SFCD1	REV 1

LOUISVILLE

SECTION 3 -- PRELIMINARY OPERATIONS & THEORY OF OPERATION

- 3.1 Read the entire testing and calibration procedure before beginning the testing and calibration process.
- 3.2 Verify accuracy of the standard(s) evidence of recent careful calibration.
- 3.3 Insure that the calibration environment is within the requirements of the published specifications, if any, for the UUT and the calibration standard(s). If no special conditions are required, the calibration procedure shall take place in an environment controlled to the extent necessary to assure continued measurements of required accuracy, giving due consideration to temperatute, humidity, vibration, cleanliness, and other controllable factors.

Recondent Assurance	Date	Supercedes	Page
LOUES Rober Dwall	02/12/92		4 of 7

	LOCAL STANDARD TEST PROCEDURE	
LOUISVILLE	MODEL # IC3600SFCD1	REV 1

When applicable, compensating corrections shall be applied to calibration results obtained in an environment which departs from acceptable conditions.

- 3.4 Visually inspect the UUT.
- 3.5 Theory of operation:

A control signal of 0 to 1.2 volts is input to
terminal 6 of the board. Several outputs supply
a pulse for triggering SCRs using phase angle
control. Proper timing is achieved by a 16 volt
AC signal applied to inputs 19 and 15 in phase
with the 220 AC power source.

The 16 volt AC signal also develops a +20 volt

DC supply which is available on output 12.

The board also contains a SCR protection and
filter circuit.

REGSi wed By: Quality Assurance	Date	Supercedes	Page
LOUES Rober Dull	02/12/92	:	5 of 7

		LOCAL STAI TEST PROCEDU			
	LOUISVILLE	MODEL # IC3600SFCD1	REV · 1		
SECTIO	N 4 TESTING AND CALIBRAT	ION PROCESS	1		
4.1	Refer to elementary diagram	n page 3.1 of	·····		
	IC3600SFCD documentation.				
4.2	Connect +27V DC to Termina	l 17, -27V to Term:	inal		
	7. and low of both supplies	s Terminal 10.	······		
4.3	Connect 0 to 1.5 volt supp	ly as follows - neg	gative		
	to Terminal 6 and positive	to Terminal 10.			
4.4	Jumper Terminal 16 to 18.	l1 to 3, 15 to 13.			
4.5	Connect 16V AC to Terminals	s 19 and 15, 220V A	4C		
	to Terminal 13 and one side of load.				
4.6	Connect other side of load to Terminal 20				
	Terminal voltage fo 19 and 20 must be in phase.				
4.7	Connect anode of SCR to Terminal 20, cathode				
	to 13. gate to 11.				
4.8	Apply all power at the same	e time.			
4.9	4.9 <u>0 - 1.2 volt control should apply power to load</u>				
	from off to full half cycle.				
4.10	10 Monitor voltage across load with oscilliscope				
	Voltage to angle firing on Page which should confirm 0 to 160 degrees on time 3.1				
4.11	Confirm pulse output on Ter	rminals 3 and 1 wit	<u>:h</u>		
	15 as common. Contra polst	between 405	registrategesperiers		
RESSiewed 1	By: Quality Assumance Da	ate Supercedes	Page		
LOUES OF					

	LOCAL STANDARD TEST PROCEDURE	
LOUISVILLE	MODEL # IC3600SFCD1	REV 1

SECTION 5 -- CHECKLIST / DATA SHEET

> Terminal:

16 to 18 For 220V 7-5 T

15 to 13

16 to 18 to 20 fy 440V

REGSiewed By: Quality Assurance [2]
LOUES Robert Dwall Supercedes Date Page Robert Dwall 02/12/92 7 of 7

