



# GE Power Generation Engineering

Materials and Processes Engineering  
Schenectady NY 12345

PROCESS SPECIFICATION

P24B-AL-4846

## TBST INSTRUCTIONS FOR MONITOR PANEL RESISTOR CARD

DOCUMENT REVISION STATUS: DETERMINED BY THE LAST ENTRY IN THE "REV" AND "DATE" COLUMN

REV.	AN NO.	DESCRIPTION	SIGNATURE	REV. DATE
A	YA00096	SPECIFICATION LISTED IN STEAM TURBINE/GENERATOR INDEX AS "INACTIVE" HAS BEEN FORMALLY REVISED AS "INACTIVE FOR NEW DESIGN". (PR BUDKA)	C.R. Tripp	DEC 1 1991
<div>INACTIVE FOR NEW DESIGN AS OF 12/02/91</div>				

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PREPARED BY: P.R. BUDKA

ORIG. ISSUE DATE: --

REV. NO. **01A**  
 P24B-AL-4846  
 CONT. ON SHEET **23** SH. NO. **12**

TITLE  
 TEST INSTRUCTIONS FOR MONITOR  
 PANEL RESISTOR CARD  
 FIRST MADE FOR **170X326**

CONT. ON SHEET **23** SH. NO. **12**

SCOPE

Monitor Resistor Card PL-948D197 \* and PL-945D804  
 Schematic 119C6479

- (A) GENERAL
- (B) TEST EQUIPMENT
- (C) SET UP
- (D) ISOLATION TEST
- (E) RESISTANCE TEST
- (F) POT RANGE TEST

REVISIONS

JUL 16 1978  
 L.D. O. J. P. O.  
 PL-945D804

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71002  
 273-71<sup>2</sup>  
 273-2  
 273-12<sup>2</sup>  
 273-138  
 273-132<sup>2</sup>  
 R3A  
 PRINTS TO

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 H. KELLER APR. 11, 1968  
 ISSUED **APR 19**

APPROVALS

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 SCHENECTADY

DIV. OR  
 DEPT.

P24B-AL-4846

LOCATION

CONT. ON SHEET **23** SH. NO. **12**

# GENERAL ELECTRIC

P24B-AL-4846

REV NO. *01A*

TITLE

CONT ON SHEET *24* SH NO. *23*

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TEST INSTRUCTIONS FOR MONITOR  
PANEL RESISTOR CARD

CONT ON SHEET *24* SH NO. *23*

FIRST MADE FOR 170X326

REVISIONS

## (A) GENERAL

This board consists of eleven (11) sets of resistors, one fixed and one variable in each set. The values of the fixed and variable are different.

The test consists of three parts.

The first, isolation test will show up any shorts or leakage between pairs of resistors.

The resistance test will check the correct wiring and proper resistance values.

The last test will check the pot ranges and resistance values at the proper pin connections.

*JUL 16 1970*  
*100-273-12*  
*Do not change*

*TBCK*  
*2*  
*273-71*  
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*273-12*  
*273-138*  
*273-13*  
*R2A*  
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LOCATION

CONT ON SHEET

*24*

SH NO.

*23*

# GENERAL ELECTRIC

P24B-AL-4846

REV NO. **dtg**  
P24B-AL-4846  
CONT ON SHEET **45** SH NO. **24**

TITLE  
TEST INSTRUCTIONS FOR MONITOR  
PANEL RESISTOR CARD  
FIRST MADE FOR 170X326

CONT ON SHEET **45** SH NO. **24**

## REVISIONS

### (B) TEST EQUIPMENT

- (1) Standard Test Panel
- (2) Ohmmeter

### (C) SET UP

- (1) For isolation test, use step switch and connect as follows --

Arm to one side of ohmmeter. The other side of ohmmeter to pin 39.  
Connect taps on switch as follows --

Tap	Pin No.
1	3
2	7
3	11
4	15
5	20
6	23
7	27
8	31
9	35
10	36

- (2) For resistance test connect step switch as follows --

Tap	Pin No.
1	1
2	5
3	9
4	13
5	18
6	22
7	25
8	29
9	33
10	37
11	41

- (3) Tie the following pins together --

3, 7, 11, 15, 20, 23, 27, 31, 35, 36 and 39.

JUL 16 1970  
H.D. Oetzel  
No change

RBER  
273-71<sup>2</sup>  
273-2  
273-12<sup>2</sup>  
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273-132<sup>2</sup>  
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1176

REV. NO. **01A**  
P24B-AL-4846  
CONT ON SHEET **56** SH NO **45**

TITLE  
TEST INSTRUCTIONS FOR MONITOR  
PANEL RESISTOR CARD  
FIRST MADE FOR 170X326

CONT ON SHEET **86** SH NO **45**

REVISIONS

**JUL 16 1970**  
*110.22/170.10*  
*No change in plot*

(D) ISOLATION TEST

- (1) Connect step switch, refer to set up instructions (C) item (1).
- (2) Step switch from positions 1 through 10 and observe ohmmeter. Readings should be above 1.0 Megohms.

(E) RESISTANCE TEST

- (1) Adjust all pots to clockwise position.
- (2) Connect step switch, refer to set up instructions (C) item (2).
- (3) Step switch from positions 1 through 11 and observe the following resistance readings. All readings to be plus or minus 1%.

Tap	Resistance in K ohms
1	34.8
2	34.8
3	24.9
4	24.9
5	26.7
6	26.7
7	5.0
8	5.0
9	5.0
10	5.0
11	5.0

**70CR**

**273-71<sup>2</sup>**

**273-2**

**273-12<sup>2</sup>**

**273-138**

**273-132<sup>2</sup>**

**R 2A**

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**1170**

P24B-AL-4846

REV NO. *21A*  
P24B-AL-4846  
CONT ON SHEET *87* SH NO. *56*

TIT F  
TEST INSTRUCTIONS FOR MONITOR  
PANEL RESISTOR CARD  
FIRST MADE FOR 170X326

CONT ON SHEET *87* SH NO. *56*

(F) POT RANGE TEST

- (1) Adjust all pots to counterclockwise position.
- (2) Repeat step 3 readings to be plus or minus 2%.

Tap	Resistance in K ohms
1	44.8
2	44.8
3	34.9
4	34.9
5	36.7
6	36.7
7	10.0
8	10.0
9	10.0
10	10.0
11	10.0

TEST COMPLETE

REVISIONS

*10.02.16 1970*  
*10.02.16 1970*  
*No change*

*TBC*  
*273-71<sup>2</sup>*  
*273-2*  
*273-122*  
*273-138*  
*273-132<sup>2</sup>*  
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H. KELLER APR. 11, 1968  
ISSUED *R*

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P24B-AL-4846

CONT ON SHEET *87* SH NO. *56*

*1170*

REV NO. **OTA**  
P24B-AL-4846  
CONT ON SHEET - SH NO. **67**

TITLE  
TEST INSTRUCTIONS FOR MONITOR  
PANEL RESISTOR CARD  
FIRST MADE FOR 170X326

CONT ON SHEET - SH NO. **67**

REVIEWED WITH:

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APPROVED BY:

L. H. JOHNSON, SUPERVISOR  
TURBINE CONTROL ENGINEERING

REVISIONS

*Handwritten:* JUL 16 1970  
110.22  
Spec'd by H. Keller

*Handwritten:* TREC  
273-71<sup>2</sup>  
273-2  
273-12<sup>2</sup>  
273-138  
273-132<sup>2</sup>  
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P24B-AL-4846

CONT ON SHEET - SH NO. **67**

*Handwritten:* 1170

# Data Sheet

Job # _____					Burn-in Start _____			
Serial # _____					Burn-in Stop _____			
Date _____					Technician _____			
Data Sheet for __0948D197G0001_____								
Test Procedure __P24B-AL-4846_____								
Test Procedure Step	Nominal	Lower Limit	Pre-Burn in Results	Post Burn in Results	Upper Limit	Pot Values If applicable CW      CCW		Pass/Fail
D	> 1 M ohm	1 M ohm						
E-1	34.8K ohm	34452 ohm			35148 ohm	R2		
E-2	34.8K ohm	34452 ohm			35148 ohm	R4		
E-3	24.9K ohm	24651 ohm			25149 ohm	R6		
E-4	24.9K ohm	24651 ohm			25149 ohm	R8		
E-5	26.7K ohm	26433 ohm			26967 ohm	R10		
E-6	26.7K ohm	26433 ohm			26967 ohm	R12		
E-7	5K ohm	4950 ohm			5050 ohm	R14		
E-8	5K ohm	4950 ohm			5050 ohm	R16		
E-9	5K ohm	4950 ohm			5050 ohm	R18		
E-10	5K ohm	4950 ohm			5050 ohm	R20		
E-11	5K ohm	4950 ohm			5050 ohm	R22		
F-1	44.8K ohm	43904 ohm			45696 ohm		R2	
F-2	44.8K ohm	43904 ohm			45696 ohm		R4	
F-3	34.9K ohm	34202 ohm			35598 ohm		R6	
F-4	34.9K ohm	34202 ohm			35598 ohm		R8	
F-5	36.7K ohm	35966 ohm			37434 ohm		R10	
F-6	36.7K ohm	35966 ohm			37434 ohm		R12	
F-7	10K ohm	9800 ohm			10200 ohm		R14	
F-8	10K ohm	9800 ohm			10200 ohm		R16	
F-9	10K ohm	9800 ohm			10200 ohm		R18	
F-10	10K ohm	9800 ohm			10200 ohm		R20	
F-11	10K ohm	9800 ohm			10200 ohm		R22	