
 <b>GE Industrial Control Systems</b>	<b>Test and Operating Procedure</b>	
	<b>DATE : 09/24/98</b>	<b>PAGE 1 OF 5</b>
<b>QUALITY REP:</b> 		
<b>TITLE:</b> <b>Motor Controller Test</b>		<b>PROCEDURE:</b> <b>LOU -GE-IC3603A232BXP-A</b>

## **1. INTRODUCTORY DESCRIPTION**

- A. This procedure establishes the methods for testing a IC3603A232BXP Motor Control
- B. Environmental ranges: 70 +/- 10 Deg. F. with 20-75% R.H.
- C. Unit warm-up/stabilization period requirement:
- D. Personnel using this procedure are expected to have a high degree of confidence and expertise in related testing and calibration procedures.
- E. Procedures not explained here are considered to be understood as common practice.

## **2. TEST EQUIPMENT VERIFICATION**

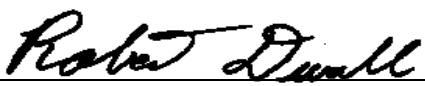
- A. Verify the accuracy of the standard(s) used in the repair/calibration process by evidence of recent calibration labeling affixed to the test equipment.
- B. All measurement standards used in this procedure shall be traceable to the NATIONAL INSTITUTE of STANDARDS and TECHNOLOGY (N.I.S.T.) and shall have the accuracy, stability, range and resolution required for the intended use.
- C. Unless otherwise specified, the collective uncertainty of the Measurement Standard(s) shall not exceed twenty five percent of the acceptable tolerance for each characteristic being calibrated.
- D. All deviations shall be documented.

## **3. EQUIPMENT CLEANING**

- A. All equipment clean will be performed as instructed in the GE T&IC SOP Sec. 14.0



## **4. EQUIPMENT INSPECTION**

- A. The following criteria should be used as a guideline or basis for the inspection process of the this unit:
  - 1. Wires broken or cracked.
  - 2. Terminal strips / connectors broken or cracked.
  - 3. Loose wires.
  - 4. Components visually damaged.
  - 5. Capacitors leaking.
  - 6. Solder joint, cold or otherwise inadequate.
  - 7. Circuit board discolored or burned.
  - 8. Printed wire runs burned or damaged.

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## 5. REVISION HISTORY

Revision	Date	Reason for Revision
A		Initial Procedure – After Verification
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		

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## 6. REFERENCE DOCUMENTATION

- Reference: GEK
- Factory Procedure #

## 7. THEORY OF OPERATION

- Reference: GEK
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## 8. TEST EQUIPMENT TO BE USED



- Frequency Generator
- Variable AC Source
- 28VDC Power Supply
- Light Bulb Load

## 9. FINAL TEST AND OPERATION PROCESS

SCB BREAKER TEST : SHORT PIN 8 TO 17 ON HS1. SCB & MX SHOULD BOTH DROP OUT. RESET SCB & MX SHOULD PICK UP.

TCB BREAKER TEST: SHORT PIN 9 TO 19 ON HS4. TCB & MX SHOULD BOTH DROP OUT. RESET TCB & MX SHOULD PICK UP.


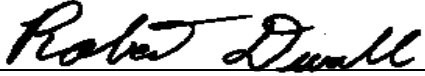
POWER FACTOR TESTING: REMOVE 32 VAC REFERENCE FROM "P" & "Q" ON TB1 DISCONNECT "S" FROM PIN 25 OF SSNA. INJECT A VARIABLE FREQUENCY (AROUND 60HZ) BETWEEN PIN 25 & PIN 1 (COMMON) OF SSNA. PF METER SHOULD BE MOVING & LOAD BULBS SHOULD BE FLASHING WHEN FREQUENCY IS CLOSET TO 60HZ (PF REG. SWITCH MUST BE ON).

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START UP TEST: WITH L1-L2 SUPPLY OFF, 28VDC & 32VAC SUPPLIES POWERED UP. SWITCH ON THE 300VAC (MOTOR FEED BACK SIMULATION). THIS SHOULD CAUSE MX TO DROP OUT. (ON FIELD INSTALLATION, MX ALSO SWITCHED OFF 28VDC/32VAC SO 28VDC/32VAC WILL NEED TO BE SWITCHED OFF TO RESET MX) AFTER MX DROPS OUT, REMOVE TO 300VAC WHILE OBSERVING GATE PULSES ON HS2. THEY SHOULD REAPPEAR IMMEDIATELY ONCE AC IS REMOVED. FCX SHOULD ALSO HAVE DROPPED OUT W/MX, BUT PICK UP AGAIN APPROXIMATELY 3-5 SECONDS AFTER AC IS REMOVED.

SCCT/PFCT TEST: WITH ALL CONNECTIONS RESTORED TO SSNA CARD, SWITCH & INPUT OF LOAD BULBS TO BLACK WIRE ON TB1 (SEE ACCOMPANYING DIAGRAM). WITH 28VDC /32VAC & 150-300VAC L1-L2 POWERED UP, ALTER FIELD CURRENT ADJ. KNOB & WATCH PF METER. WHEN KNOB IS TURNED BOTH DIRECTIONS, THE METER SHOULD MOVE SLIGHTLY.

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**10. SPECIAL INFORMATION**

**TEST WRITTEN BY: John Madden**

**DATE: 9/24/98**

**TEST VERIFIED BY: \_\_\_\_\_**

**DATE: \_\_\_\_\_**