GLV QA Audit Report

ECE 492 – Spring 2013

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Abstract

This QA Report documents the quality assurance tests for Grounded Low Voltage Power.
Contents

G-T01: ONLY POWER LED TURNS ON WITH POWER .................................................. 2
PRECONDITIONS ................................................................. 2
TEST PROCEDURE .......................................................... 2
PASSING CRITERIA ......................................................... 2

G-T02: FIRST KEY SWITCH OUTPUTS 24V TO SCADA ......................................... 3
PRECONDITIONS ................................................................. 3
TEST PROCEDURE .......................................................... 3
PASSING CRITERIA ......................................................... 3

G-T03: SECOND KEY SWITCH OUTPUTS 24V TO LOAD CONTROLLER AND SAFETY .... 2
PRECONDITIONS ................................................................. 2
TEST PROCEDURE .......................................................... 2
PASSING CRITERIA ......................................................... 2
G-T01: Only power LED turns on with power

Preconditions
- GLV box is plugged into AC wall outlet.
- Power switch is in the 'off' position (The symbol is a circle).

Test Procedure
1. Flip the power switch into the 'on' position (The symbol is a straight line).
2. Use a multimeter to measure output voltage from the three outputs.

Passing Criteria
1. Power LED turns on
   
   Measured Value 1: Light is on

   [signature] 8/26/13 Pass
   Witness/Examiner Signature Date Pass/Fail

2. Output is 0V at each output.

   Measured Value 1: 0 V
   Measured Value 2: 0 V
   Measured Value 3: 0 V

   [signature] 8/26/13 Pass
   Witness/Examiner Signature Date Pass/Fail
G-T02: First key switch outputs 24V to SCADA

Preconditions
- GLV Box is plugged in and turned on.

Test Procedure
1. Put safety key in the first key switch.
2. Turn the key all the way to the right.

Passing Criteria
1. Power LED above switch turns on.

Measured Value 1: **Light On**

[Signature] 8/26/13 Pass/Fail

Witness/Examiner Signature  Date  Pass/Fail

2. Output is 24V at SCADA output and 0V at the other outputs.

Measured Value 1: **24.07 V**

Measured Value 2: **0 V**

Measured Value 3: **0 V**

[Signature] 8/26/13 Pass/Fail

Witness/Examiner Signature  Date  Pass/Fail
G-T03: Second key switch outputs 24V to Load Controller and Safety

Preconditions
- GLV Box is plugged in and turned on.
- First key switch is turned on.

Test Procedure
1. Put safety key in the second key switch.
2. Turn the key all the way to the right.

Passing Criteria
1. Power LED above switch turns on.

Measured Value 1: light on

Witness/Examiner Signature 8/26/13 Pass/Fail

2. Output is 24V at all outputs.

Measured Value 1: 24.07V
Measured Value 2: 24.07V
Measured Value 3: 24.07V

Witness/Examiner Signature 8/26/13 Pass/Fail