Ecovent Wall Sensor "HiPot" (Dielectric Voltage Withstand Test)

1. 100% of Wall Sensors 901-00010 must be tested compliant to the ETL test specification provided.
2. Test must be performed at the final assembly level at a minimum of 1500 VAC for 1.00 seconds.
3. Test records must be retained by testing organization with certificate of compliance for every production lot.
4. See production floor work instructions below for detailed test procedure and visual aids.

11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

Required Tests

Dielectric Voltage Withstand Test

11.1 Dielectric Voltage Withstand Test

Method

One hundred percent of production of the products covered by this Report shall be subjected to a routine production line dielectric withstand test.

The test shall be conducted on products, which are fully assembled. Prior to applying the test potential, all switches, contactors, relays, etc., should be closed so that all primary circuits are energized by the test potential. If all primary circuits cannot be tested at one time, then separate applications of the test potential shall be made.

The test voltage specified below shall be applied between primary circuits and accessible dead-metal parts. The test voltage may be gradually increased to the specified value but must be maintained at the specified value for one second or one minute as required.

Test Equipment

The test equipment shall incorporate a transformer with an essentially sinusoidal output, a means to indicate the applied test potential, and an audible and/or visual indicator of dielectric breakdown.

The test equipment shall incorporate a voltmeter in the output circuit to indicate directly the applied test potential if the rated output of the test equipment is less than 500VA.

If the rated output of the test equipment is 500VA or more, the applied test potential may be indicated by either:
1 - a voltmeter in the primary circuit;
2 - a selector switch marked to indicate the test potential; or
3 - a marking in a readily visible location to indicate the test potential for test equipment having a single test potential output.
In cases 2 and 3, the test equipment shall include a lamp or other visual means to indicate that the test potential is present at the test equipment output. All test equipment shall be maintained in current calibration.

Products Requiring Dielectric Voltage Withstand Test:

Product	Test Voltage	Test Time
All products covered by this Report.	1240V or 1488V	60 s 1 s

Revision	Author	Date
A	Pentecost	2.16.16
B	Pentecost	2.23.16

Ecovent HiPot Test Procedure For Wall Sensor 901-00010

Description: Instructions for setting up and performing the HiPot test on the Ecovent Wall Sensor assembly. 100% of devices must be tested with results recorded by serial number in SFDC.

Equipment Required:

1. Associated Research Quadchek Model 6554SA HiPot Tester or equivalent.
2. Ecovent HiPot Cable (see Figure 1)

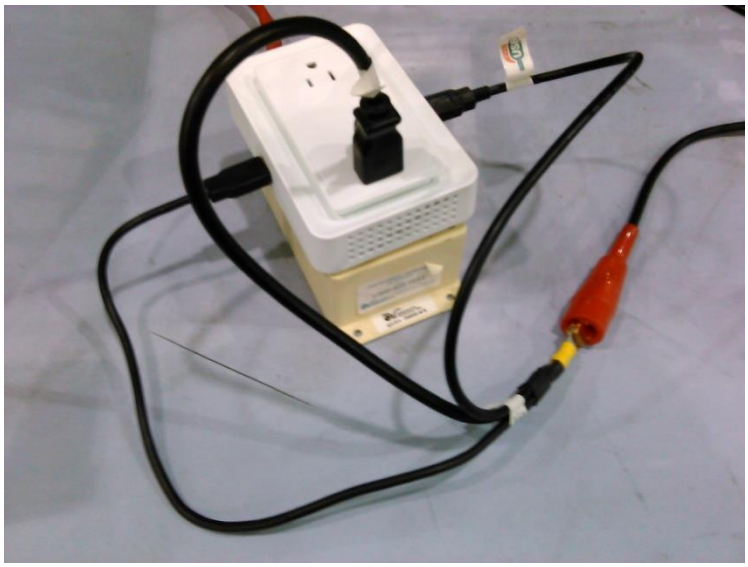

Figure 1. Ecovent HiPot Cable Connected to Wall Sensor

Reference Documents:

1. Associated Research Model 6554SA Operation and Service Manual
2. Attachment A - Settings For Quadchek 6554SA HiPot Tester

NOTE: Prior to performing the HiPot test, verify that the "Quadcheck Ground Continuity/Hi-Pot Verification Test" (SOP-4-1041-340) was performed that day and that the HiPot/Ground Bond "Just Fail" Log (SOP-4-1035-340) was filled out with the test record. If there is no entry on the "Just Fail" log for today's date, stop and contact engineering.

To Recall and Enter/Edit a Program (See Appendix A for HiPot instrument settings):
(Refer to Figure 2)

1. Press 'RECALL' key.
2. Type desired program number 'xx' using numeric keypad **(Enter 15 for Ecovent Wall Sensor HiPot).**
3. Press 'ENTER' key. Skip to "Performing the HiPot Test" if you are not entering a new program or changing an existing one.
4. Press 'REVIEW' key.
5. Press down arrow or up arrow keys to scroll through menus.
6. Use the 'DATA ENTRY' and 'ENTER' keys to change or toggle between selections.
7. Press 'RUN/CLEAR' key.
8. Press 'STORAGE' key
9. Select a memory to store the program in (1-15).
   NOTE: The Ecovent program is stored in location 15.
10. Press 'ENTER' key.

Figure 2. Quadchek Data Entry Keypad and Display

Performing the HiPot Test:

1. Connect the Ecovent HiPot cable as shown in Figures 1 & 3.

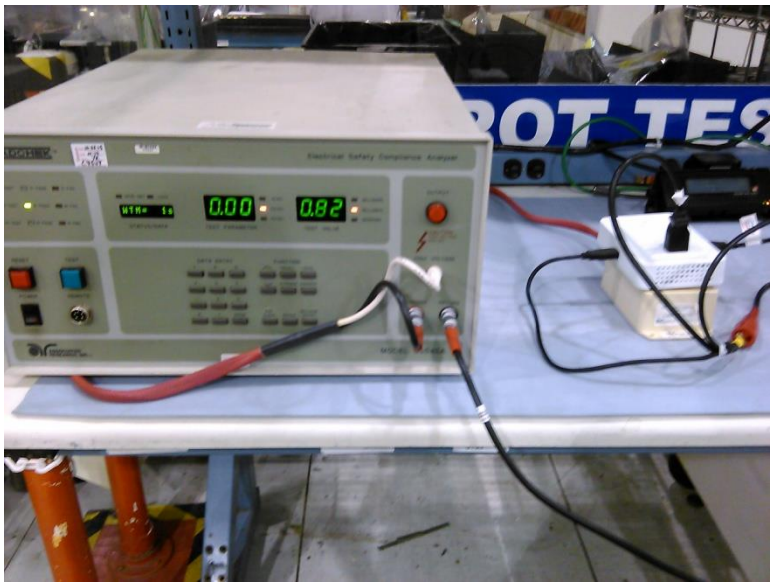

Figure 3. Ecovent Wall Sensor HiPot Cable Connections to Quadchek.

2. Press ‘TEST’ key on HiPot tester. See Figure 2.
3. Wait approximately 30 seconds.
4. If ‘PASS’ status indicator illuminates (green), then the test passes. Perform the following:
    a. Disconnect the HiPot Cables from the UUT.
    b. Scan the Ecovent Wall Sensors serial number into SFDC as a “PASS” and initial/date the traveler. Move the Wall Sensor to the next step in the process.
5. If the ‘FAIL’ status indicator illuminates then test fails. Scan the serial number of the board into SFDC as a fail and move it into the Debug area.

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Appendix A – Settings For Quadchek 6554SA HiPot Tester

This is what should be loaded into the program 15 location on the Quadchek:
(Another program number could also be used if it is available)

R =	OFF
CON =	OFF
G =	OFF
W =	ON
WVS =	1500
WHA =	10.0
WLA =	0.0
WTS =	1
WRT =	30
WMD =	AC
WHZ =	60Hz
ARC =	ON
WCH =	00000000