|  |  |  |
| --- | --- | --- |
| Customer | : …………………………………………………………………………. | |
| Equipment | : REMOTE VIEW ALARM SYSTEM | |
| Model No. | : NLRVAF07 | |
| Serial No. | : .............................................................................. | |
| Tag No. | : .............................................................................. | |
| System Location | : ...................................................................................................... | |
| **Protocol Pre Approval** | | |
| Prepared By: | Name : .....................................................  Sign : ..................................................... | Company  ...................................................................... |
| Reviewed By: | Name : .....................................................  Sign : ..................................................... | Company  ...................................................................... |
| Approved By: | Name : .....................................................  Sign : ..................................................... | Company  ...................................................................... |

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# Protocol approval

The responsible person signing the Pre-Approval page (page no: **1**) had reviewed and approved the Installation Qualification protocol for Newtronic make Remote View Alarm System. Signing of this protocol indicates that the contents of the documents had been reviewed, all test procedures are accurate and the acceptance criteria are applicable for the intended purpose of this study.

# Brief Description

The Remote View Alarm System that is supplied to ……………………………………… at………………………….. for Monitoring of the Newtronic make chambers with in working area. The equipment has other features such as alarming and send SMS on define numbers. It has Controller with display at the front for human interface.

# Purpose

The purpose of this document is to verify the performance of the Remote View Alarm System, installed within ………………………………………………………; It consists in the following consecutive sub-activities:

* ALARM TESTING: It demonstrates that the RVAS, when equipments parameters go out of limit the RVAS gives alarm locally.
* SMS Sending: It determines/demonstrates the RVAS can send SMS on defined numbers when parameters of equipments go out of limit.

# Test procedures

The Performance for Remote View Alarm System shall be verified by testing alarm and SMS, loaded condition, using the test data sheets provided in the protocol. The test data sheets will be used to document the performance of the Remote View Alarm System and to verify that the temperature and relative humidity condition conforms to the User Requirements.

## Test rules

The PQ forms are intended for entering tests notations pertaining to individual tests and any deviations that may occur.All Loaded test result must be completed manually during the test execution, as well as for the remarks areas.

If the test is not applicable please marked "N / A” (not applicable) or "N / R" (nothing to report). All corrections must be dated and done by hand. The original info has to be crossed out by a single line. The corrected information must be clearly visible.

Each completed tests has to be signed and dated. Deviations from the PQ specification that occur must be registered in the deviation protocol and recorded in the appendix.

The PQ is concluding if all acceptance criteria are fulfilled and the notation / deviations registered in the deviation protocol are remedied or accepted.

# Responsibilities relatives to the protocol, execution of tests and report

* Newtronic Lifecare Equipment is responsible for the creation of this protocol.
* Newtronic Lifecare Equipment is responsible for the creation of this protocol ………………………………………………………………….. representatives are responsible to approve this Protocol within the working area.
* Newtronic is responsible to execute the tests in requested order.

# System functional

The Remote View alarm system ensures that the Newtronic make chambers are working as per required set conditions and its gives an alarms if deviation is occurred in the chamber as well as it is send a message on defined mobile numbers in Remote View Alarm System.

# Material and equipement to use

Newtronic calibrated measure recorder equipment for temperature and relative humidity includes:

* Sensors (aquisition system of temperature and relative humidity).
* Electronic interface base module linked to sensors ( Instrument identification and instrument calibration verification).
* A local printer
* Full instrumentation identification and qualification report of used program.

# Testing of Alarm and SMS GENERATION by RVAS

### Procedure

1. Turn on the UPS supply and the RAW power supply to the RVAS.
2. Follow the below steps in the test data sheet so as to test different alarms.
3. Change the limits of one of the chamber at chamber for testing
4. Confirm that the set temperature and humidity values are maintained.
5. Feed the Mobile numbers and user details in Remote view alarm system setting.
6. For the alarm testing interchange the limits at chamber for generating the alarms.
7. This procedure use for temperature alarm (± 2º C) limits. (E.g. for generation of LOW temperature alarm set low limit +2º C to set value the alarm will generate for Temperature LOW Alarm, For High Temperature alarm, Set High alarm Limit -2º C to set value the alarm will generate for Temperature High Alarm.)
8. This procedure use for Humidity alarm (± 5% RH) Limit (E.g. for generation of High Humidity alarm, set Humidity High alarm limit -5%RH to set value the alarm will generate for Humidity High Alarm, For Low Humidity Alarm Set LOW ALARM LIMIT +5% RH to set value the alarm will generate for Humidity Low Alarm)
9. Note down the fault generated by controller
10. After generating the fault SMS is transfer by RVAS with in pre-define time.
11. Once testing is done reset the controller to its original working state.

### Reports

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Alarms | Procedure | Test result met  Yes No | Comment | Remark |
|  | Temperature LOW Alarm | 1. Check for the generated alarm on the display of chamber. 2. Check whether the alarm had transfer by RVAS? |  |  |  |
|  | Temperature HIGH t Alarm | 1. Check for the generated alarm on the display of chamber. 2. Check whether the alarm had transfer by RVAS? |  |  |  |
|  | RH LOW Alarm | 1. Check for the generated alarm on the display of chamber. 2. Check whether the alarm had transfer by RVAS? |  |  |  |
|  | RH HIGH Alarm | 1. Check for the generated alarm on the display of chamber. 2. Check whether the alarm had transfer by RVAS? |  |  |  |
| Done by : …………………………….. Sign: ……………….. Date:……………….  Approved by : …………………………….. Sign: ……………….. Date:………………. | | | | | |

# evaluation of the Alarm tests, SMS Generation and conclusion

|  |  |  |
| --- | --- | --- |
| The tests described within this protocol and performed on the mentioned above chambers, meet the acceptance criteria defined earlier: | | Complies / Fails |
| Alarm Testing | Temporary status delivered by the technician who performed the qualification tests **(e)** |  |
| SMS Generation | Temporary status delivered by the technician who performed the qualification tests **(e)** |  |

**(e):** When the entire tests of this protocol have been realized, the technician delivers a temporary status to the project manager.

|  |  |
| --- | --- |
| Comments (Ref.) | …………………………………………………………………………………………………  …………………………………………………………………………………………………  ………………………………………………………………………………………………… |
| Attachments (Ref.) | …………………………………………………………………………………………………  …………………………………………………………………………………………………  ………………………………………………………………………………………………… |

# 

# Deviation Protocol

Sequential no:………………………………………..

Deviations to the acceptance criteria that occur during testing need to be stated in the deviation protocol. One deviation protocol must be created for each deviation and the sequential number to be indicated accordingly.

The deviation protocol can be copied as required.

|  |  |
| --- | --- |
| **Description of problem** | ……………………………………………………………………………………  ……………………………………………………………………………………  ……………………………………………………………………………………  ……………………………………………………………………………………  ……………………………………………………………………………………  …………………………………………………………………………………… |
| **Measures for trouble shooting** | ……………………………………………………………………………………  ……………………………………………………………………………………  ……………………………………………………………………………………  ……………………………………………………………………………………  ……………………………………………………………………………………  …………………………………………………………………………………… |
| **Remarks** | ……………………………………………………………………………………  ……………………………………………………………………………………  …………………………………………………………………………………… |
| **Executor**  **Verified/ accepted by** | **Sign:** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . **Date:**. . . . . . . . . . . . . . . . . .  **Sign:** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . **Date:**. . . . . . . . . . . . . . . . . . |

# Appendix

|  |  |  |
| --- | --- | --- |
| **Annexure Number** | **Contents** | **Number of pages** |
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# Approval of test results

The PQ is approved if all acceptance criteria are fulfilled and the notations / deficiencies registered in the deviation protocol are remedied or fully accepted.

Approved by:

|  |  |  |
| --- | --- | --- |
| **Tests executed** | **Name** | **Signature and Date** |
| Executor: | . . . . . . . . . . . . . . . . . . . . . | . . . . . . . . . . . . . . . . . . . . . . . . |
| **All Test criteria have been fulfilled** | **Name** | **Signature and Date** |
| Verified: | . . . . . . . . . . . . . . . . . . . . . | . . . . . . . . . . . . . . . . . . . . . . . . |
| **All Test criteria have been fulfilled** | **Name** | **Signature and Date** |
| Approved: | . . . . . . . . . . . . . . . . . . . . . | . . . . . . . . . . . . . . . . . . . . . . . . |

Remarks

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