# UUT Report

| | |
|---|---|
| **Station ID:** | IT-W-7303101 |
| **Serial Number:** | NONE |
| **Date:** | **mercoledì 21 giugno 2023** |
| **Time:** | **10:05:57** |
| **Operator:** | **administrator** |
| **Execution Time:** | **2263.4451421 seconds** |
| **Number of Results:** | **1652** |
| **UUT Result:** | **Failed** |
| **Product:** | **ARI LV** |
| **Product type:** | **ARI LV** |
| **Comm type:** | **COMM1_RS485** |
| **Product FW Version:** | **56010707** |
| **Comm FW Version:** | **42030100** |
| **Failure Chain:** | |

| Step | Sequence | Sequence File |
|---|---|---|
| Check Half open | Power Outage | General_test.seq |
| Power Outage | MainSequence | General_test.seq |

**Begin Sequence: MainSequence**
**(C:\Users\itlavit1\OneDrive - ABB\LabRnD_Shared\TestStand\Sequences\MOD\General_test.seq)**

| General and Architecture and LED | |
|---|---|
| Status: | Skipped |
| Input-Output | |
| Status: | Passed |
| Module Time: | 137.009932 |

**Begin Sequence: I/O**
**(C:\Users\itlavit1\OneDrive - ABB\LabRnD_Shared\TestStand\Sequences\MOD\General_test.seq)**

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check that remote closing hasn't appened. |
| Status: | Passed |
| Additional Results | |
| Status: | Done |
| PopupString: | Check that remote closing hasn't appened. |
| Status: | Passed |
| Additional Results | |
| Status: | Done |
| PopupString: | Check that remote opening hasn't appened. |
| Status: | Passed |
| Additional Results | |
| Status: | Done |
| PopupString: | Check that remote opening hasn't appened. |
| Status: | Passed |
| Check Outputs | |

| | |
|---|---|
| Status: | Passed |
| Configuration: | MOD in Active State and MPD OPEN |
| Output 1: | True |
| Output 2: | False |

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check that remote opening worked. |
| Status: | Passed |

| Check Outputs | |
|---|---|
| Status: | Passed |
| Configuration: | MOD in Active State and MPD OPEN |
| Output 1: | False |
| Output 2: | False |

| Check Outputs | |
|---|---|
| Status: | Passed |
| Configuration: | MOD in Active State and MPD OPEN |
| Output 1: | False |
| Output 2: | False |

| Check Outputs | |
|---|---|
| Status: | Passed |
| Configuration: | MOD in Active State and MPD HALF OPEN |
| Output 1: | True |
| Output 2: | False |

| Check Outputs | |
|---|---|
| Status: | Passed |
| Configuration: | MOD in Active State and MPD HALF OPEN |
| Output 1: | True |
| Output 2: | False |

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check that remote closing worked. |
| Status: | Passed |

| Check Outputs stand-by | |
|---|---|
| Status: | Passed |
| Configuration: | MOD in Lock State |
| Output 1: | False |
| Output 2: | False |

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check that closing has not worked due to input command but for the auto-reclosing. |
| Status: | Passed |

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check ARI is in Lock state. |
| Status: | Passed |

| Check Outputs | |
|---|---|
| Status: | Passed |
| Configuration: | MOD in Lock State |
| Output 1: | False |
| Output 2: | True |

| Check Outputs | |
|---|---|
| Status: | Passed |
| Configuration: | MOD in Lock State |
| Output 1: | False |
| Output 2: | True |
| Additional Results | |
| Status: | Done |
| PopupString: | Check that remote closing not worked. |
| Status: | Passed |

**End Sequence: I/O**

| Power Outage | |
|---|---|
| Status: | Failed |
| Module Time: | 93.4352294 |

**Begin Sequence: Power Outage**
**(C:\Users\itlavit1\OneDrive - ABB\LabRnD_Shared\TestStand\Sequences\MOD\General_test.seq)**

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check that the MOD open automatically the MPD at power On without reclosing. |
| Status: | Passed |
| Additional Results | |
| Status: | Skipped |
| Check Half open | |
| Status: | Failed |
| Additional Results | |
| Status: | Done |
| PopupString: | Check that the MOD open automatically the MPD at power On and reclose without dead time. |
| Status: | Passed |

**End Sequence: Power Outage**

| Motor Driver | |
|---|---|
| Status: | Passed |
| Module Time: | 584.998663 |

**Begin Sequence: Motor Driver**
**(C:\Users\itlavit1\OneDrive - ABB\LabRnD_Shared\TestStand\Sequences\MOD\General_test.seq)**

| MPD MODEL | |
|---|---|
| Status: | Done |
| MPD MODEL: | F204 |

| Power Consumption at rest | |
|---|---|
| Status: | Passed |
| Measurement: | 0 |
| Limits: | |
| Low: | 1 |

| | |
|---|---|
| Comparison Type: | LE (<=) |
| Configuration: | At Rest |

| Power Consumption during opening | |
|---|---|
| Status: | Passed |
| Measurement: | 0 |
| Limits: | |
| Low: | 25 |
| Comparison Type: | LE (<=) |
| Configuration: | Opening |

| Power Consumption during closing | |
|---|---|
| Status: | Passed |
| Measurement: | 0 |
| Limits: | |
| Low: | 25 |
| Comparison Type: | LE (<=) |
| Configuration: | Closing |

| Power Consumption at rest after | |
|---|---|
| Status: | Passed |
| Measurement: | 0 |
| Limits: | |
| Low: | 1 |
| Comparison Type: | LE (<=) |
| Configuration: | At Rest |

| Power Consumption during auto-closing | |
|---|---|
| Status: | Passed |
| Measurement: | 0 |
| Limits: | |
| Low: | 25 |
| Comparison Type: | LE (<=) |
| Configuration: | Closing |

**End Sequence: Motor Driver**

| Modbus Register check | |
|---|---|
| Status: | Failed |
| Module Time: | 1424.1192039 |

**Begin Sequence: Modbus Register check**
**(C:\Users\itlavit1\OneDrive - ABB\LabRnD_Shared\TestStand\Sequences\MOD\General_test.seq)**

| Internal communication failure | |
|---|---|
| Status: | Done |
| Register Value: | OK |

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check that the remote opening via modbus worked. |
| Status: | Passed |

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check that the remote closing via modbus worked. |
| Status: | Passed |

| | |
|---|---|
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing via modbus has not worked due to closing command but for autoreclosing procedure. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing via modbus has not worked. |
| Status: | Passed |
| **input** | |
| Status: | Done |
| Register Value: | Disable |
| **Pass/Fail Test** | |
| Status: | Passed |
| **Communication** | |
| Status: | Done |
| Register Value: | Disable |
| **Pass/Fail Test** | |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing via input has not worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing via modbus has not worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing via input has not worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing via modbus has not worked. |
| Status: | Passed |
| **input** | |
| Status: | Done |
| Register Value: | Disable |
| **Pass/Fail Test** | |
| Status: | Passed |
| **Communication** | |
| Status: | Done |
| Register Value: | Disable |
| **Pass/Fail Test** | |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |

| | |
|---|---|
| PopupString: | Check that the remote opening via input has not worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote opening via modbus has not worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote opening via input has not worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote opening via modbus has not worked. |
| Status: | Passed |
| **input** | |
| Status: | Done |
| Register Value: | Enable |
| **Pass/Fail Test** | |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing via modbus has not worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing via input worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote opening via modbus has not worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote opening via input worked. |
| Status: | Passed |
| **Communication** | |
| Status: | Done |
| Register Value: | Enable |
| **Pass/Fail Test** | |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing and opening via input worked. |
| Status: | Passed |
| **Additional Results** | |
| Status: | Done |
| PopupString: | Check that the remote closing and opening via modbus worked. |
| Status: | Passed |
| **Additional Results** | |

| Status: | Done |
|---|---|
| PopupString: | Check that the remote closing via input has not worked. |
| Status: | Passed |

## Additional Results

| Status: | Done |
|---|---|
| PopupString: | Check that the remote closing via modbus worked. |
| Status: | Passed |

## Additional Results

| Status: | Done |
|---|---|
| PopupString: | Check that the remote opening via input has not worked. |
| Status: | Passed |

## Additional Results

| Status: | Done |
|---|---|
| PopupString: | Check that the remote opening via modbus worked. |
| Status: | Passed |

## Reclosing attempts

| Status: | Done |
|---|---|
| Register Value: | 3 |

## Waiting time among reclosing

| Status: | Done |
|---|---|
| Register Value: | 3 |

## Neutralization time

| Status: | Done |
|---|---|
| Register Value: | 12 |

## Additional Results

| Status: | Done |
|---|---|
| PopupString: | Check that the ARI entered the Lock state with the prefixed settings. |
| Status: | Passed |

## Reclosing attempts

| Status: | Done |
|---|---|
| Register Value: | 5 |

## Test Update Reclosing attempts

| Status: | Passed |
|---|---|

## Waiting time among reclosing

| Status: | Done |
|---|---|
| Register Value: | 5 |

## Test Update Time among reclosing

| Status: | Passed |
|---|---|

## Neutralization time

| Status: | Done |
|---|---|
| Register Value: | 45 |

## Test Update Neutralization time

| Status: | Passed |
|---|---|

## Additional Results

| Status: | Done |
|---|---|
| PopupString: | Check that the ARI entered the Lock state with the new settings. |

| | |
|---|---|
| Status: | Passed |

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check that the ARI entered the Lock state with the new settings. |
| Status: | Passed |

| Additional Results | |
|---|---|
| Status: | Done |
| PopupString: | Check with modbus poll that the maximum settable value of the neutralization time and waiting time before reclosing is 300 and the maximum number of reclosing attempts is 10. |
| Status: | Passed |

| Status Breaker | |
|---|---|
| Status: | Done |
| Register Value: | Open |

| Test Status Breaker | |
|---|---|
| Status: | Passed |

| Status Breaker | |
|---|---|
| Status: | Done |
| Register Value: | Open |

| Test Status Breaker | |
|---|---|
| Status: | Passed |

| Status Breaker | |
|---|---|
| Status: | Done |
| Register Value: | Close |

| Test Status Breaker | |
|---|---|
| Status: | Passed |

| Status Breaker | |
|---|---|
| Status: | Done |
| Register Value: | Close |

| Test Status Breaker | |
|---|---|
| Status: | Passed |

| Status Breaker | |
|---|---|
| Status: | Done |
| Register Value: | Open |

| Test Status Breaker | |
|---|---|
| Status: | Passed |

| Status Breaker | |
|---|---|
| Status: | Done |
| Register Value: | Open |

| Test Status Breaker | |
|---|---|
| Status: | Passed |

| Tripped | |
|---|---|
| Status: | Done |
| Register Value: | No Trip |

| Test Tripped | |
|---|---|
| Status: | Passed |

| Tripped | |
| --- | --- |
| Status: | Done |
| Register Value: | Trip |
| Test Tripped | |
| Status: | Passed |
| Tripped | |
| Status: | Done |
| Register Value: | Trip |
| Test Tripped | |
| Status: | Passed |
| Tripped | |
| Status: | Done |
| Register Value: | Trip |
| Test Tripped | |
| Status: | Passed |

| Tripped | |
| --- | --- |
| Status: | Done |
| Register Value: | No Trip |
| Test Tripped | |
| Status: | Passed |

| TIME Tripped | |
| --- | --- |
| Status: | Done |
| Time Tripped before: | 000101000000 |
| TIME Tripped | |
| Status: | Done |
| Time Tripped after: | 000101000008 |
| Check Time Tripped | |
| Status: | Failed |
| String: | 000101000008 |
| Limits: | |
| String: | 000101000000 |
| Comparison Type: | Ignore Case |

| Maneuvre parameters graphs | |
| --- | --- |
| Status: | Done |
| Peak current in mA[0..9]: |  |
| Motor torque in mN-m[0..9]: | |

Time to max torque in ms[0..9]:



Peak torque toggle angle in degree[0..9]:



Closing time in ms[0..9]:
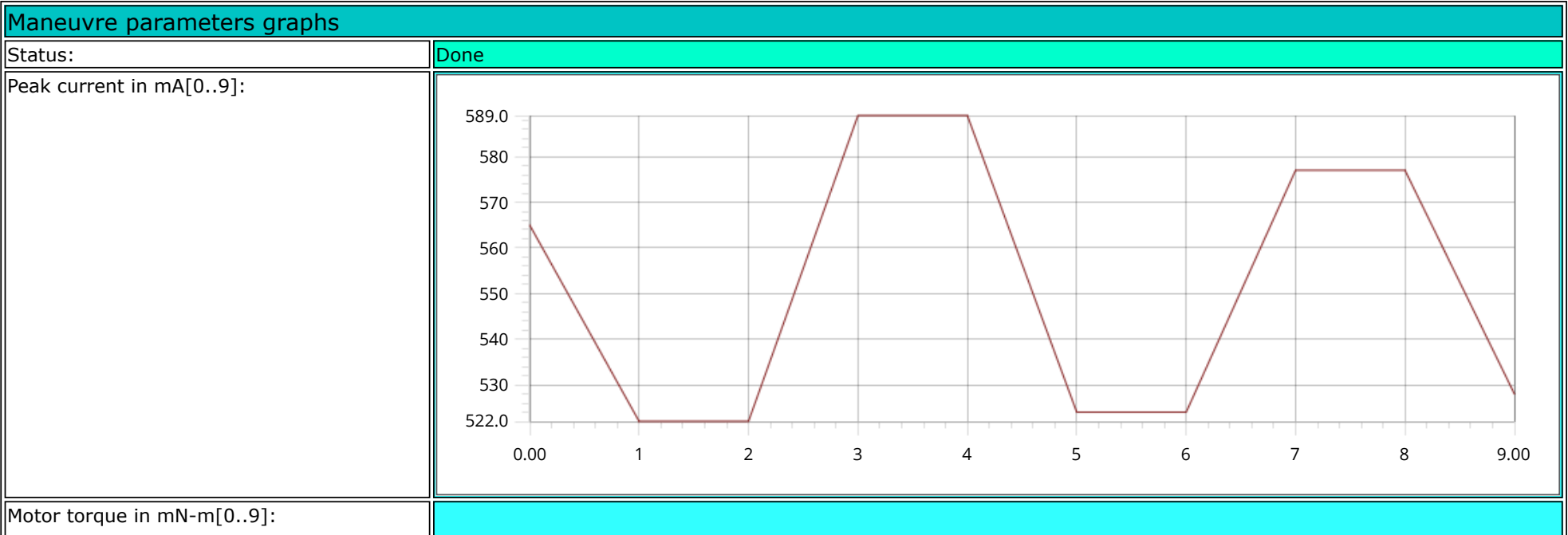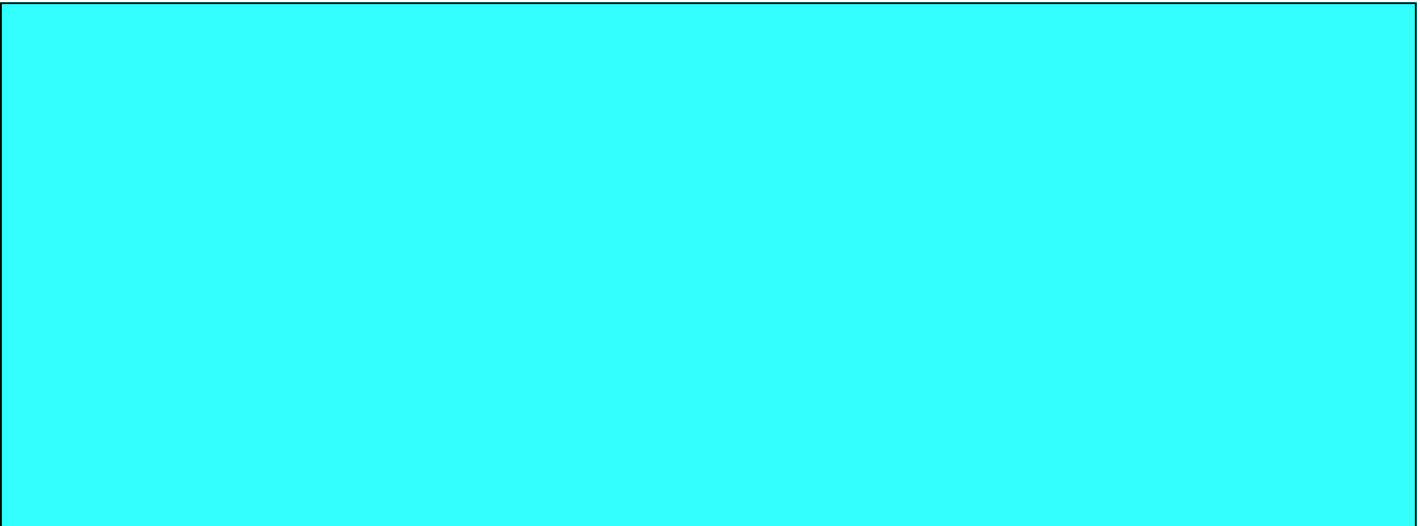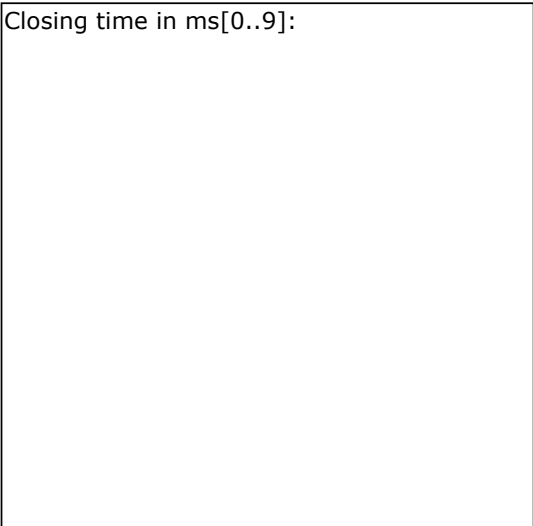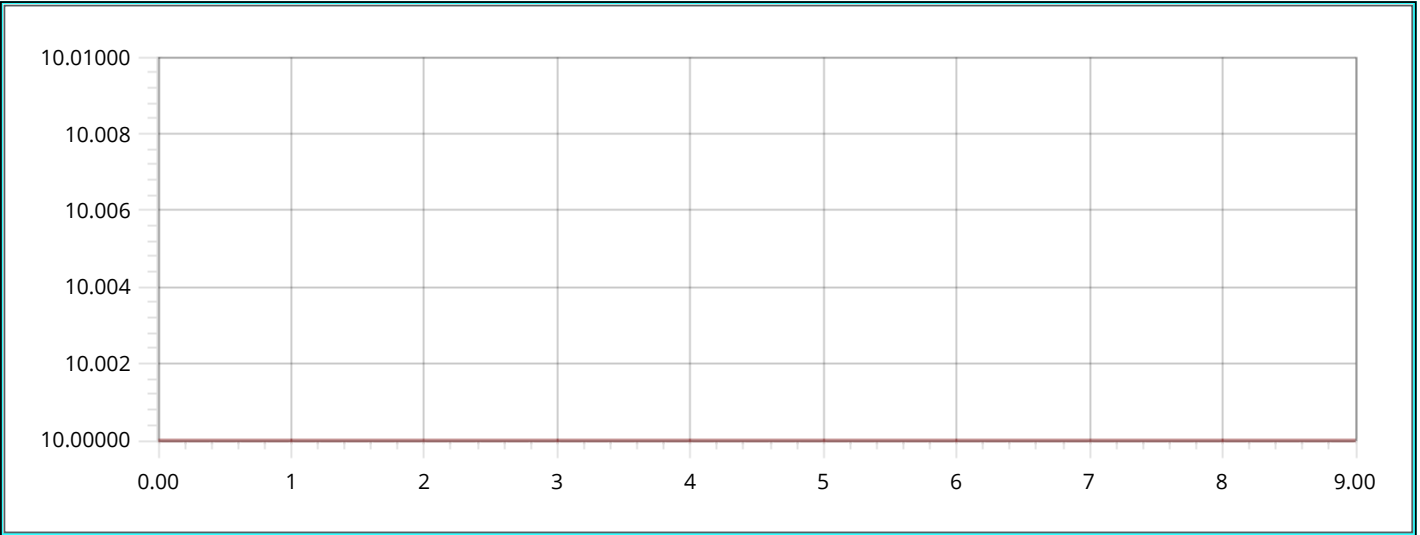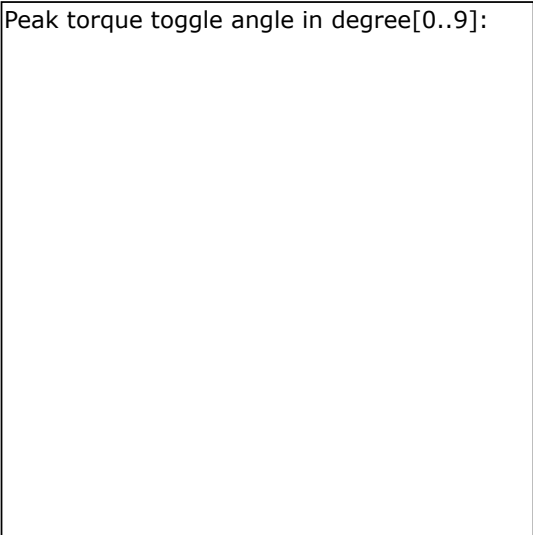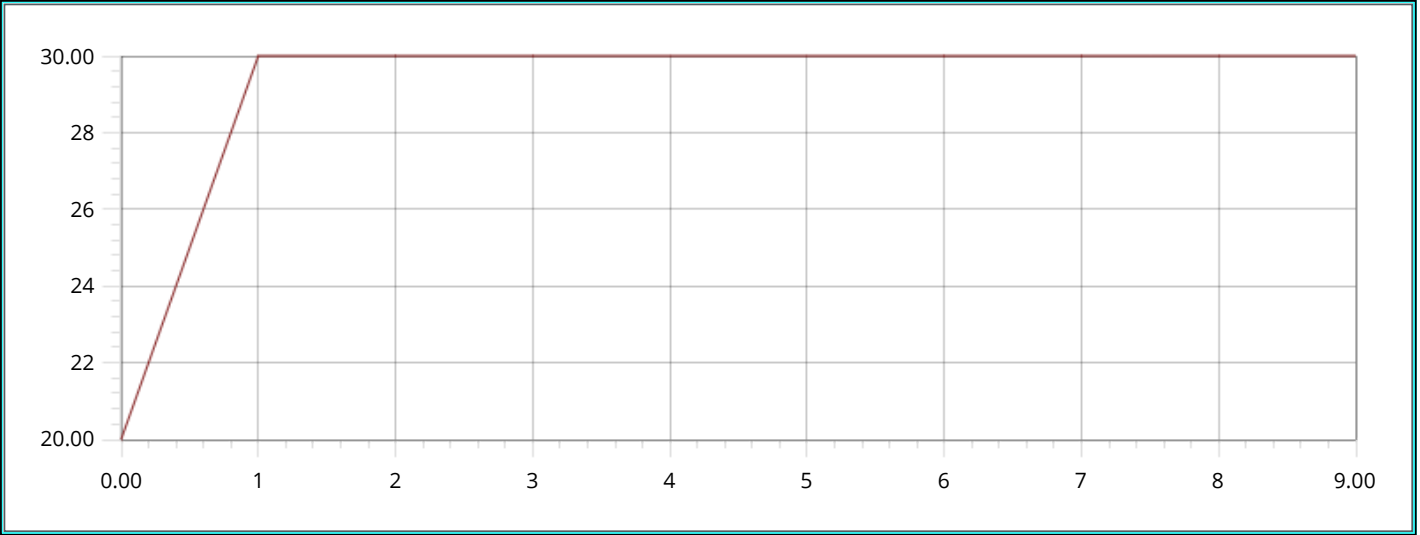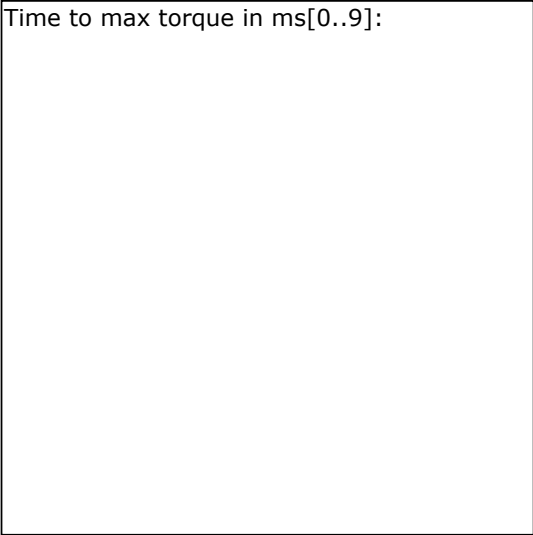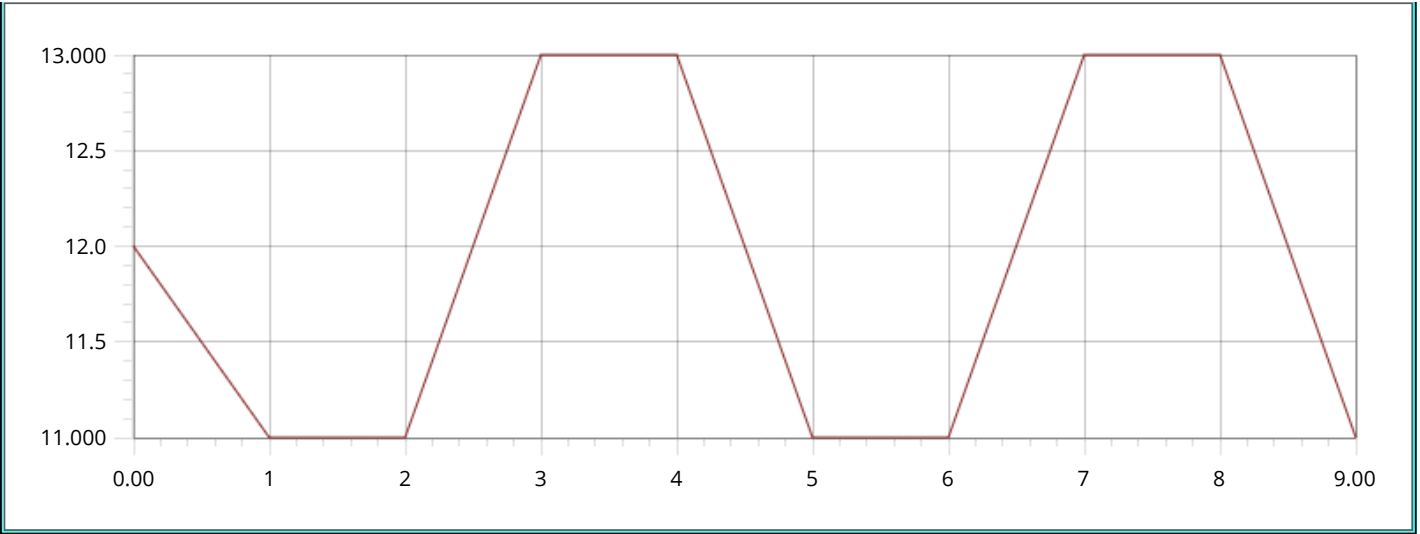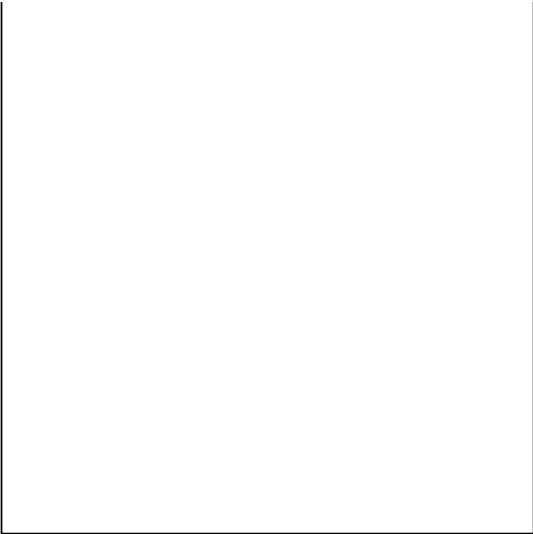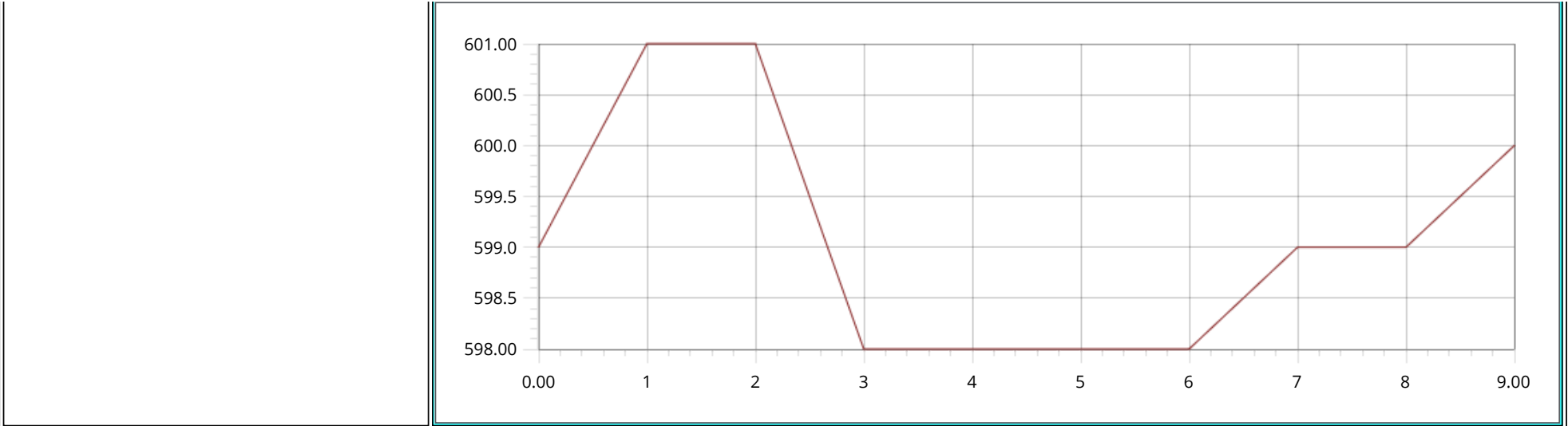
Opening time in ms[0..9]:



| Maneuver attempt ongoing | |
|---|---|
| Status: | Done |
| Register Value: | No Maneuver |

| Test Maneuvre ongoing | |
|---|---|
| Status: | Passed |

| Parallel Call - Read loop | |
|---|---|
| Status: | Done |
| Module Time: | 0.0023939 |

| Meneuvre Ongoing test | |
|---|---|
| Status: | Passed |

| Maneuvre Ongoing Results | |
|---|---|
| Status: | Done |
| Value of the register before the first change: | No Maneuver |
| Value of the register after the first change: | Maneuver ongoing |
| Number of changes: | 2 |

| Maneuver attempt ongoing | |
|---|---|
| Status: | Done |
| Register Value: | No Maneuver |

| Test Maneuvre ongoing | |
|---|---|
| Status: | Passed |

| Parallel Call - Read loop | |
|---|---|
| Status: | Done |
| Module Time: | 0.0020544 |

| Meneuvre Ongoing test | |
|---|---|

| | |
|---|---|
| Status: | Passed |

## Maneuvre Ongoing Results

| | |
|---|---|
| Status: | Done |
| Value of the register before the first change: | No Maneuver |
| Value of the register after the first change: | Maneuver ongoing |
| Number of changes: | 2 |

## Maneuver attempt ongoing

| | |
|---|---|
| Status: | Done |
| Register Value: | No Maneuver |

## Test Maneuvre ongoing

| | |
|---|---|
| Status: | Passed |

## Total Number of maneuvre

| | |
|---|---|
| Status: | Done |
| Register Value: | 278 |

## Total Number of closing maneuvre

| | |
|---|---|
| Status: | Done |
| Register Value: | 248 |

## Total Number of maneuver

| | |
|---|---|
| Status: | Done |
| Register Value: | 298 |

## Test total number maneuvre

| | |
|---|---|
| Status: | Passed |

## Total Number of closing maneuver

| | |
|---|---|
| Status: | Done |
| Register Value: | 258 |

## Test total number closing

| | |
|---|---|
| Status: | Passed |

## Total Number of maneuvre

| | |
|---|---|
| Status: | Done |
| Register Value: | 298 |

## Total Number of closing maneuvre

| | |
|---|---|
| Status: | Done |
| Register Value: | 258 |

## Total Number of maneuver

| | |
|---|---|
| Status: | Done |
| Register Value: | 308 |

## Test total number maneuvre

| | |
|---|---|
| Status: | Passed |
| Measurement: | 308 |
| Limits: | |
| Low: | 308 |
| Comparison Type: | EQ (==) |

## Total Number of closing maneuver

| | |
|---|---|
| Status: | Done |
| Register Value: | 268 |

## Test total number closing

| | |
|---|---|
| Status: | Passed |
| Measurement: | 268 |
| Limits: | |

| | |
|---|---|
| Low: | 268 |
| Comparison Type: | EQ (==) |

| Output 1 | |
|---|---|
| Status: | Done |
| Register Value: | MOD lever open |

| Test Output1 | |
|---|---|
| Status: | Passed |

| Output 2 | |
|---|---|
| Status: | Done |
| Register Value: | Lock-out state not-active |

| Test output 2 | |
|---|---|
| Status: | Passed |

| Input 1 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 1 | |
|---|---|
| Status: | Passed |

| Input 2 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 2 | |
|---|---|
| Status: | Passed |

| Output 1 | |
|---|---|
| Status: | Done |
| Register Value: | MOD lever close |

| Test Output1 | |
|---|---|
| Status: | Passed |

| Output 2 | |
|---|---|
| Status: | Done |
| Register Value: | Lock-out state not-active |

| Test output 2 | |
|---|---|
| Status: | Passed |

| Input 1 | |
|---|---|
| Status: | Done |
| Register Value: | Active |

| Test Input 1 | |
|---|---|
| Status: | Passed |

| Input 2 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 2 | |
|---|---|
| Status: | Passed |

| Output 1 | |
|---|---|
| Status: | Done |
| Register Value: | MOD lever open |

| Test Output1 | |
|---|---|
| Status: | Passed |

| Output 2 | |
|---|---|

| Status: | Done |
|---|---|
| Register Value: | Lock-out state not-active |

| Test output 2 | |
|---|---|
| Status: | Passed |

| Input 1 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 1 | |
|---|---|
| Status: | Passed |

| Input 2 | |
|---|---|
| Status: | Done |
| Register Value: | Active |

| Test Input 2 | |
|---|---|
| Status: | Passed |

| Output 1 | |
|---|---|
| Status: | Done |
| Register Value: | MOD lever open |

| Test Output1 | |
|---|---|
| Status: | Passed |

| Output 2 | |
|---|---|
| Status: | Done |
| Register Value: | Lock-out state not-active |

| Test output 2 | |
|---|---|
| Status: | Passed |

| Input 1 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 1 | |
|---|---|
| Status: | Passed |

| Input 2 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 2 | |
|---|---|
| Status: | Passed |

| Output 1 | |
|---|---|
| Status: | Done |
| Register Value: | MOD lever open |

| Test Output1 | |
|---|---|
| Status: | Passed |

| Output 2 | |
|---|---|
| Status: | Done |
| Register Value: | Lock state |

| Test output 2 | |
|---|---|
| Status: | Passed |

| Input 1 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 1 | |
|---|---|
| Status: | Passed |

| Input 2 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 2 | |
|---|---|
| Status: | Passed |

| Output 1 | |
|---|---|
| Status: | Done |
| Register Value: | MOD lever close |

| Test Output1 | |
|---|---|
| Status: | Passed |

| Output 2 | |
|---|---|
| Status: | Done |
| Register Value: | Lock-out state not-active |

| Test output 2 | |
|---|---|
| Status: | Passed |

| Input 1 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 1 | |
|---|---|
| Status: | Passed |

| Input 2 | |
|---|---|
| Status: | Done |
| Register Value: | Not Active |

| Test Input 2 | |
|---|---|
| Status: | Passed |

| TIME Power Fail | |
|---|---|
| Status: | Done |
| Time Power Fail before: | FFFFFFFFFFFF |

| TIME Power Fail | |
|---|---|
| Status: | Done |
| Time Power Fail after: | FFFFFFFFFFFF |

| Check Time Tripped | |
|---|---|
| Status: | Passed |
| String: | FFFFFFFFFFFF |
| Limits: | |
| String: | FFFFFFFFFFFF |
| Comparison Type: | Ignore Case |

| LAST DEMANDED COMMAND FAILED PF | |
|---|---|
| Status: | Done |
| Register Value: | All command completed |

| Test last demanded command | |
|---|---|
| Status: | Passed |

| LAST DEMANDED COMMAND FAILED PF | |
|---|---|
| Status: | Done |
| Register Value: | All command completed |

| Test last demanded command | |
|---|---|
| Status: | Passed |

| Parallel Call - Read loop power fail | |
|---|---|
| Status: | Done |
| Module Time: | 0.0026621 |

| Meneuvre power fail test | |
|---|---|
| Status: | Passed |

| Parallel Call - Read loop power fail | |
|---|---|
| Status: | Done |
| Module Time: | 0.0018437 |

| Meneuvre power fail test | |
|---|---|
| Status: | Passed |

| Parallel Call - Read loop power fail | |
|---|---|
| Status: | Done |
| Module Time: | 0.0018413 |

| Meneuvre power fail test | |
|---|---|
| Status: | Passed |

| Diagnostic register | |
|---|---|
| Status: | Done |
| Register Value: | 2 |

| Pass/Fail Test | |
|---|---|
| Status: | Passed |

| Diagnostic register | |
|---|---|
| Status: | Done |
| Register Value: | 1 |

| Pass/Fail Test | |
|---|---|
| Status: | Passed |

| Diagnostic register | |
|---|---|
| Status: | Done |
| Register Value: | 2 |

| Pass/Fail Test | |
|---|---|
| Status: | Passed |

| Diagnostic register | |
|---|---|
| Status: | Done |
| Register Value: | 8 |

| Pass/Fail Test | |
|---|---|
| Status: | Passed |

| Diagnostic register | |
|---|---|
| Status: | Done |
| Register Value: | 1 |

| Pass/Fail Test | |
|---|---|
| Status: | Failed |

| Diagnostic register | |
|---|---|
| Status: | Done |
| Register Value: | 4 |

| Pass/Fail Test | |
|---|---|
| Status: | Passed |

| Product type number ID MOD | |
|---|---|
| Status: | Done |
| Register Value: | ARI LOW VOLTAGE |

| Product type number ID COMM | |
|---|---|
| Status: | Done |
| Register Value: | COMM1_RS485 |

| Product Type MOD | |
|---|---|
| Status: | Done |
| Product Type MOD: | 4152495F4C56FFFFFFFFFFFFFFFFFFFF |

| Product Type COMM | |
|---|---|
| Status: | Done |
| Product Type COMM: | "" |

| Serial Number MOD | |
|---|---|
| Status: | Done |
| Serial Number MOD: | FFFFFFFFFFFFFFFFFFFF |

| Serial Number COMM | |
|---|---|
| Status: | Done |
| Serial Number COMM: | FFFFFFFFFFFFFFFFFFFF |

| FW Version MOD | |
|---|---|
| Status: | Done |
| FW Version MOD: | 56010707 |

| FW Version COMM | |
|---|---|
| Status: | Done |
| FW Version COMM: | 42030100 |

| Modbus RTU parameter Slave Address | |
|---|---|
| Status: | Done |
| Register Value: | 1 |

| Modbus RTU parameter Baud Rate | |
|---|---|
| Status: | Done |
| Register Value: | 19200 |

| Modbus RTU parameter Parity | |
|---|---|
| Status: | Done |
| Register Value: | EVEN |

**End Sequence: Modbus Register check**

**End Sequence: MainSequence**

# End UUT Report