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# **Introduction**

## **Purpose**

{{ PURPOSE }}

## **Scope**

{{ SCOPE }}

## Relationship with Other Documents

|  |  |
| --- | --- |
| **Document Reference** | **Document Title** |
| {% for item in RELATED\_DOCUMENTS %}{{ item.Document\_Reference }} | {{ item.Document\_Title }} |
| {% endfor %} |  |

## SAT Protocol Pre-Execution Approval

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Print Name** | **Signature** | **Date** | **Initial** | **Company** |
| {% for row in PRE\_APPROVALS%}{{row['Print\_Name’] }} | {{ row['Signature'] }} | {{row['Date'] }} | {{row['Initial']}} | {{row['Company']}} |
| {% endfor %} |  |  |  |  |

## SAT Protocol Post Execution Approval

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Print Name** | **Signature** | **Date** | **Initial** | **Company** |
| {% for row in POST\_APPROVALS%}{{row['Print\_Name’] }} | {{ row['Signature'] }} | {{row['Date'] }} | {{row['Initial']}} | {{row['Company']}} |
| {% endfor %} |  |  |  |  |

# **Pre-Test Requirements**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item** | **Test** | **Method/Test Steps** | **Acceptance Criteria** | **Result** | **Punch Item** | **Verified by** | **Comment** |
| {% for row in PRE\_TEST\_REQUIREMENTS %}{{ row['Item'] }} | {{ row['Test'] }} | {{ row['Method/Test Steps'] }} | {{ row['Acceptance Criteria'] }} | {{ row['Result'] }} | {{ row['Punch Item'] }} | {{ row['Verified by'] }} | {{ row['Comment'] }} |
| {% endfor %} |  |  |  |  |  |  |  |

# **Asset Register**

* 1. KEY COMPONENTS

|  |  |  |  |
| --- | --- | --- | --- |
| **S.no** | **Model** | **Description** | **Remarks** |
| {% for row in KEY\_COMPONENTS %}{{ row['S\_no'] }} | {{ row['Model'] }} | {{ row['Description'] }} | {{ row['Remarks'] }} |
| {% endfor %} |  |  |  |

* 1. IP ADDRESS RECORDS

|  |  |  |
| --- | --- | --- |
| **Device** | **IP Address/Subnet/Gateway** | **Comments** |
| {% for row in IP\_RECORDS %}{{ row['Device\_Name'] }} | {{ row['IP\_Address'] }} | {{ row['Comment'] }} |
| {% endfor %} |  |  |

# **Signal Tests**

## **Digital Module Signals**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Rack No.** | **Module Position** | **Signal TAG** | **Signal Description** | **Result** | **Punch Item** | **Verified By** | **Comment** |
| {% for row in SIGNAL\_LISTS %}{{ row['S. No.'] }} | {{ row['Rack No.'] }} | {{ row['Module Position'] }} | {{ row['Signal TAG'] }} | {{ row['Signal Description'] }} | {{ row[‘Result'] }} | {{ row['Punch Item'] }} | {{ row['Verified By'] }} | {{ row['Comment'] }} |
| {% endfor %} |  |  |  |  |  |  |  |  |

## **4.2 Analogue Module Signals**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Rack No.** | **Module Position** | **Signal TAG** | **Signal Description** | **Result** | **Punch Item** | **Verified By** | **Comment** |
| {% for row in ANALOGUE\_LISTS %}{{ row['S. No.'] }} | {{ row['Rack No.'] }} | {{ row['Module Position'] }} | {{ row['Signal TAG'] }} | {{ row['Signal Description'] }} | {{ row[‘Result'] }} | {{ row['Punch Item'] }} | {{ row['Verified By'] }} | {{ row['Comment'] }} |
| {% endfor %} |  |  |  |  |  |  |  |  |

## **4.3Modbus Digital**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Address** | **Description** | **Remarks** | **Result** | **Punch Item** | **Verified By** | **Comment** |
| {% for row in MODBUS\_DIGITAL\_LISTS %}{{ row['Address'] }} | {{ row['Description'] }} | {{ row['Remarks'] }} | {{ row['Result'] }} | {{ row[‘Punch Item'] }} | {{ row['Verified By'] }} | {{ row['Comment'] }} |
| {% endfor %} |  |  |  |  |  |  |

## **4.4Modbus Analogue**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Address** | **Description** | **Range** | **Result** | **Punch Item** | **Verified By** | **Comment** |
| {% for row in MODBUS\_ANALOGUE\_LISTS %}{{ row[' **Address**'] }} | {{ row['**Description**'] }} | {{ row['**Range**'] }} | {{ row['Result'] }} | {{ row[‘Punch Item'] }} | {{ row['Verified By'] }} | {{ row['Comment'] }} |
| {% endfor %} |  |  |  |  |  |  |

## **4.5Data Validation**

|  |  |  |  |
| --- | --- | --- | --- |
| Tag | Range | SCADA Value | HMI Value |
| {% for row in DATA\_VALIDATION%}{{ row['Tag'] }} | {{ row['**Range**'] }} | {{ row['SCADA Value'] }} | {{ row['HMI Value'] }} |
| {% endfor %} |  |  |  |

# **Process test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Action** | **Expected / Required Result** | **Pass/Fail** | **Comments** |
| {% for row in PROCESS\_TEST%}{{ row['Item'] }} | {{ row['Action'] }} | {{ row['**Expected / Required Result**'] }} | {{ row[' **Pass/Fail** '] }} | {{ row[' **Comments** '] }} |
| {% endfor %} |  |  |  |  |

# **SCADA Verification**

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Expected Result** | **Pass/Fail** | **Comments** |
| {% for row in SCADA\_VERIFICATION %}{{ row['Task'] }} | {{ row['Expected Result'] }} | {{ row['Pass/Fail'] }} | {{ row['Comments'] }} |
| {% endfor %} |  |  |  |

{% for image in SCADA\_IMAGES %}

{{ image }}

{% endfor %}

# **Trends Testing**

|  |  |  |  |
| --- | --- | --- | --- |
| **Trend** | **Expected Behavior** | **Pass/Fail** | **Comments** |
| {% for row in TRENDS\_TESTING %}{{ row['Trend'] }} | {{ row['Expected Behavior'] }} | {{ row['Pass/Fail'] }} | {{ row['Comments'] }} |
| {% endfor %} |  |  |  |

{% for image in TRENDS\_IMAGES %}

{{ image }}

{% endfor %}

# **Scada / SMS Alarms**

|  |  |  |  |
| --- | --- | --- | --- |
| **Alarm Type** | **Expected Result** | **Pass/Fail** | **Comments** |
| {% for row in ALARM\_LIST%}{{ row['Alarm Type'] }} | {{ row['**Expected / Required Result**'] }} | {{ row[' **Pass/Fail** '] }} | {{ row[' **Comments** '] }} |
| {% endfor %} |  |  |  |

**{% for image in ALARM\_IMAGES %}**

**{{ image }}**

**{% endfor %}**

# **List Of Test Equipment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Equipment/Tool** | **Make/Model** | **Serial No.** | **Calibration Date** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
| 7 |  |  |  |  |

# **Punch List Items**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **Detail of Non-Conformance** | **Raised By** | **Comment** | **Approved By** | **Date** |
|  |  |  |  |  |  |
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