**Document Information**

|  |  |
| --- | --- |
| **Document Title** | {{ DOCUMENT\_TITLE }} |
| **Project reference** | {{ PROJECT\_REFERENCE }} |
| **Document Reference** | {{ DOCUMENT\_REFERENCE }} |
| **Date** | {{ DATE }} |
| **Prepared for** | {{ CLIENT\_NAME }} |
| **Revision** | {{ REVISION }} |

**Document Approvals**

|  |  |  |
| --- | --- | --- |
| **Prepared by** | {{ PREPARED\_BY }} | {{ SIG\_PREPARED }}  {{ PREPARER\_DATE }} |
| **Reviewed by** | {{ REVIEWED\_BY\_TECH\_LEAD }} | {{ SIG\_REVIEW\_TECH }}  {{ TECH\_LEAD\_DATE }} |
| **Reviewed by** | {{ REVIEWED\_BY\_PM }} | {{ SIG\_REVIEW\_PM }}  {{ PM\_DATE }} |
| **Approval (Client)** | {{ APPROVED\_BY\_CLIENT }} | {{ SIG\_APPROVAL\_CLIENT }} |

**Document Version Control**

|  |  |  |
| --- | --- | --- |
| Revision Number | Details | Date |
| {{ REVISION }} | {{REVISION\_DETAILS}} | {{REVISION\_DATE}} |
|  |  |  |

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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**

## **KEY COMPONENTS**

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

## **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 Input 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 %} |  |  |  |  |  |  |  |  |

## **Digital Output Signals**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Rack No.** | **Module Position** | **Signal TAG** | **Signal Description** | **Result** | **Punch Item** | **Verified By** | **Comment** |
| {% for row in DIGITAL\_OUTPUT\_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 %} |  |  |  |  |  |  |  |  |

## **Analogue Input 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 %} |  |  |  |  |  |  |  |  |

## **Analogue Output Signals**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Rack No.** | **Module Position** | **Signal TAG** | **Signal Description** | **Result** | **Punch Item** | **Verified By** | **Comment** |
| {% for row in ANALOGUE\_OUTPUT\_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 %} |  |  |  |  |  |  |  |  |

## **Modbus 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 %} |  |  |  |  |  |  |

## **Modbus 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 %} |  |  |  |  |  |  |

## **Data 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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