1. **GENERAL INFORMATION :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bay no. / CB no.** |  |  | **Rated Voltage** | 110 VAC |
| **Make** |  | **Aux. Voltage** | 125 VDC |
| **Order No.** | 1MRK004814-AC | **Model No.** | **REC670** |
| **Serial No.** |  | **VT Ratio** | 132kV/115V |
| **Frequency** | 60 Hz | **CT Ratio** | 1200/1A |

1. **MECHANICAL CHECKS AND VISUAL INSPECTION:**

|  |  |  |  |
| --- | --- | --- | --- |
| ITEM | DESCRIPTION | CHECKED | |
| 1 | Inspect for physical damage / defects. | ❑ Yes | ❑ N/A |
| 2 | Check tightness of VT connections. | ❑ Yes | ❑ N/A |
| 3 | Indication checked | ❑ Yes | ❑ N/A |
| 4 | Human Machine Interface (HMI) checked | ❑ Yes | ❑ N/A |

1. **MEASUREMENT:**
   1. **VOLTAGE MEASUREMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Injected**  **Value** | **Expected**  **Value** | **BCU MEASUREMENT** | | |
| **L1 - L2** | **L2 – L3** | **L3 – L1** |
| **33.2 V** | 66 kV |  |  |  |
| **66.4 V** | 132 kV |  |  |  |
| **79.68 V** | 158.4 kV |  |  |  |

* 1. **CURRENT MEASUREMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Injected**  **Value** | **Expected**  **Value** | **BCU MEASUREMENT** | | |
| **L1** | **L2** | **L3** |
| **0.500 A** | 600 A |  |  |  |
| **1.0 A** | 1200 A |  |  |  |
| **1.20 A** | 1440 A |  |  |  |

* 1. **FREQUENCY MEASUREMENT**

|  |  |  |
| --- | --- | --- |
| **Injected**  **Value** | **Expected**  **Value** | **BCU MEASUREMENT** |
| **FREQUENCY** |
| **58.0 HZ** | 58.0 HZ |  |
| **59.0 HZ** | 59.0 HZ |  |
| **60.0 HZ** | 60.0 HZ |  |

* 1. **POWER MEASUREMENT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Phase**  **Angle °** | **BCU MEASUREMENT** | | | | | |
| **Active Power MW** | | **Reactive Power MVAR** | | **Power Factor** | |
| **Expected**  **Value** | **BCU** | **Expected**  **Value** | **BCU** | **Expected**  **Value** | **BCU** |
| **0°** | 274.35 |  | 0 |  | 1.0 |  |
| **60°** | 137.17 |  | 237.60 |  | 0.5 |  |
| **90°** | 0 |  | 274.35 |  | 0 |  |
| **120°** | -137.17 |  | 237.60 |  | -0.5 |  |
| **-30°** | 237.60 |  | -137.17 |  | 0.866 |  |

1. **SYNCHRO-CHECK TEST :**
   1. **Phase DELTA THreSHOLd**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Angle Setting In Degree** | | **OPERATION** | **HIGH** | **LOW** |
| LINE | **20°** | Operate |  |  |
| Reset |  |  |
| BUS | **20°** | Operate |  |  |
| Reset |  |  |

* 1. **VOLTAGE DELTA THRESHOLD**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Diff. Voltage Setting P-N Secondary** | **Calculated**  **Value** | **Measured Value** | | | |
| **LOW** | | **HIGH** | |
| LINE | **20 %** | 13.28 V |  |  |  |  |
| BUS | **20 %** | 13.28 V |  |  |  |  |

* 1. **FREQUENCY DELTA THRESHOLD**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Frequency Delta Threshold Setting** | **Blocking** | **Frequency Delta Threshold** | |
| **Operate** | **Reset** |
| LINE | 100 mHz | High blocking |  |  |
| Low blocking |  |  |
| BUS | 100 mHz | High blocking |  |  |
| Low blocking |  |  |

* 1. **ENERGIZED MODE CHECK**

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Expected** | **Pick-Up** | **Drop Off** |
| **Live** Bus | 53.12 V |  |  |
| **Dead** Bus | 19.92 V |  |  |
| **Live** Line | 53.12 V |  |  |
| **Dead** Line | 19.92 V |  |  |

* 1. **TIME DELAY FOR SYNCHRONIZING:**

|  |  |
| --- | --- |
| **Time Delay Setting** | **Measured** |
| 1.00 sec |  |