1. **SYNCH. CHECK FUNCTION TEST :**
   1. **VOLTAGE DIFFERENCE ( ΔU ) CHECK**

∆U Check (BUS) UN = 66.4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ∆U setting (Un) | U1 | U2 (High) | | U2 (Low) | |
| P/U | D/O | P/U | D/O |
|  | 66.4 |  |  |  |  |

∆U Check (LINE) UN = 66.4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ∆U setting (%Un) | U1 | U2 (High) | | U2 (Low) | |
| P/U | D/O | P/U | D/O |
|  | 66.4 |  |  |  |  |

* 1. **PHASE DIFFERENCE ( ΔΦ ) CHECK**

∆Ф Check (BUS)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ∆Ф setting | High | | Low | |
| P/U | D/O | P/U | D/O |
|  |  |  |  |  |

∆Ф Check (LINE)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ∆Ф setting | High | | Low | |
| P/U | D/O | P/U | D/O |
|  |  |  |  |  |

### **FREQUENCY DIFFERENCE ( Δ F ) CHECK**

∆F Check ( BUS )

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ∆F setting | High | | Low | |
| P/U | D/O | P/U | D/O |
|  |  |  |  |  |

∆F Check ( LINE )

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ∆F setting | High | | Low | |
| P/U | D/O | P/U | D/O |
|  |  |  |  |  |

### **MANUAL ENERGIZING :**

|  |  |  |  |
| --- | --- | --- | --- |
| Element | Description | Setting | Pickup |
| 1 | V< Dead Line |  |  |
| 2 | V> Live Line |  |  |
| 3 | V< Dead Bus |  |  |
| 4 | V> Live Bus |  |  |

### **AUTO ENERGIZING :**

|  |  |  |  |
| --- | --- | --- | --- |
| Element | Description | Setting | Pickup |
| 1 | V< Dead Line |  |  |
| 2 | V> Live Line |  |  |
| 3 | V< Dead Bus |  |  |
| 4 | V> Live Bus |  |  |

### **ENERGIZED MODE CHECK**

Auto Mode :

|  |  |
| --- | --- |
| Mode | Status Check |
| Live Line / Dead Bus |  |
| Dead Line / Live Bus |  |

Manual Mode :

|  |  |
| --- | --- |
| Mode | Status Check |
| Live Line / Dead Bus |  |
| Dead Line / Live Bus |  |
| Dead Line / Dead Bus |  |

### **UNDER VOLTAGE**

|  |  |  |
| --- | --- | --- |
| Setting | Pickup ( V ) | Drop off ( V ) |
|  |  |  |

### **TIME CHECK**

* Auto Synch Time ( tsCA )

|  |  |
| --- | --- |
| Setting ( ms ) | Measured ( ms ) |
|  |  |

Note: 50ms add for inbuilt function block timer.

* Manual Synch Time ( tsCM )

|  |  |
| --- | --- |
| Setting ( sec ) | Measured ( sec ) |
|  |  |

* Auto Energize Time ( tAutoEnerg )

|  |  |  |
| --- | --- | --- |
| Setting ( ms ) | DBLL | LBDL |
|  |  |  |

* Manual Energize Time ( tManEnerg )

|  |  |  |
| --- | --- | --- |
| Setting ( ms ) | DBLL | LBDL |
|  |  |  |

* Maximum Voltage for energizing :

|  |  |  |
| --- | --- | --- |
| Setting | Pickup | Drop off |
|  |  |  |

### **AUTORECLOSE FUNCTION CHECK:**

### **TIME CHECK:**

|  |  |  |
| --- | --- | --- |
| Timer | Setting Time ( sec ) | Measured Time ( sec ) |
| Dead Time ( T1 ) |  |  |
| Reclaim Time |  |  |
| Close Pulse Time |  |  |

### **FUNCTION CHECK :**

|  |  |  |
| --- | --- | --- |
| Item | Description | Result |
| 1 | Initiation signal by extending positive to binary input and internal |  |
| 2 | A/R Unsuccessful with excessive closing time |  |
| 3 | A/R block checked during in progress |  |
| 4 | A/R block by absence of CB ready signal to binary input |  |
| 5 | A/R block due to synchro-check not ok |  |
| 6 | A/R block by excessive shot |  |