

| SECTION-I | | | | |
|--------------------------|--------------------|--|-------------------|--------------------|
| | TOTAL LOAD (IN KW) | TOTAL LOAD AFTER OVERALL DIVERSITY (IN KW) | RATING (IN KVA) | SIZE AFTER LOADING |
| TRANSFORMER-1 (1250 KVA) | 823 KW | 741 KW (KW*0.90) | 823 KVA (KW/0.90) | 968 KW (KVA/0.85) |
| DG SET-1 (380 KVA) | 296 KW | 237 KW (KW*0.80) | 296 KVA (KW/0.80) | 348 KVA (KVA/0.85) |

| SECTION-II | | | | |
|--------------------------|--------------------|--|-------------------|--------------------|
| | TOTAL LOAD (IN KW) | TOTAL LOAD AFTER OVERALL DIVERSITY (IN KW) | RATING (IN KVA) | SIZE AFTER LOADING |
| TRANSFORMER-1 (1250 KVA) | 115 KW | 104 KW (KW*0.90) | 115 KVA (KW/0.90) | 135 KVA (KVA/0.85) |
| DG SET-2 (125 KVA) | 115 KW | 92 KW (KW*0.80) | 115 KVA (KW/0.80) | 135 KVA (KVA/0.85) |

NOTE:-

- 1) ALL TP MCCB TO BE PROVIDED WITH HEAVY DUTY SOLID NEUTRAL LINK.

OPERATION/INTER LOCKING CHART FOR LT PANEL

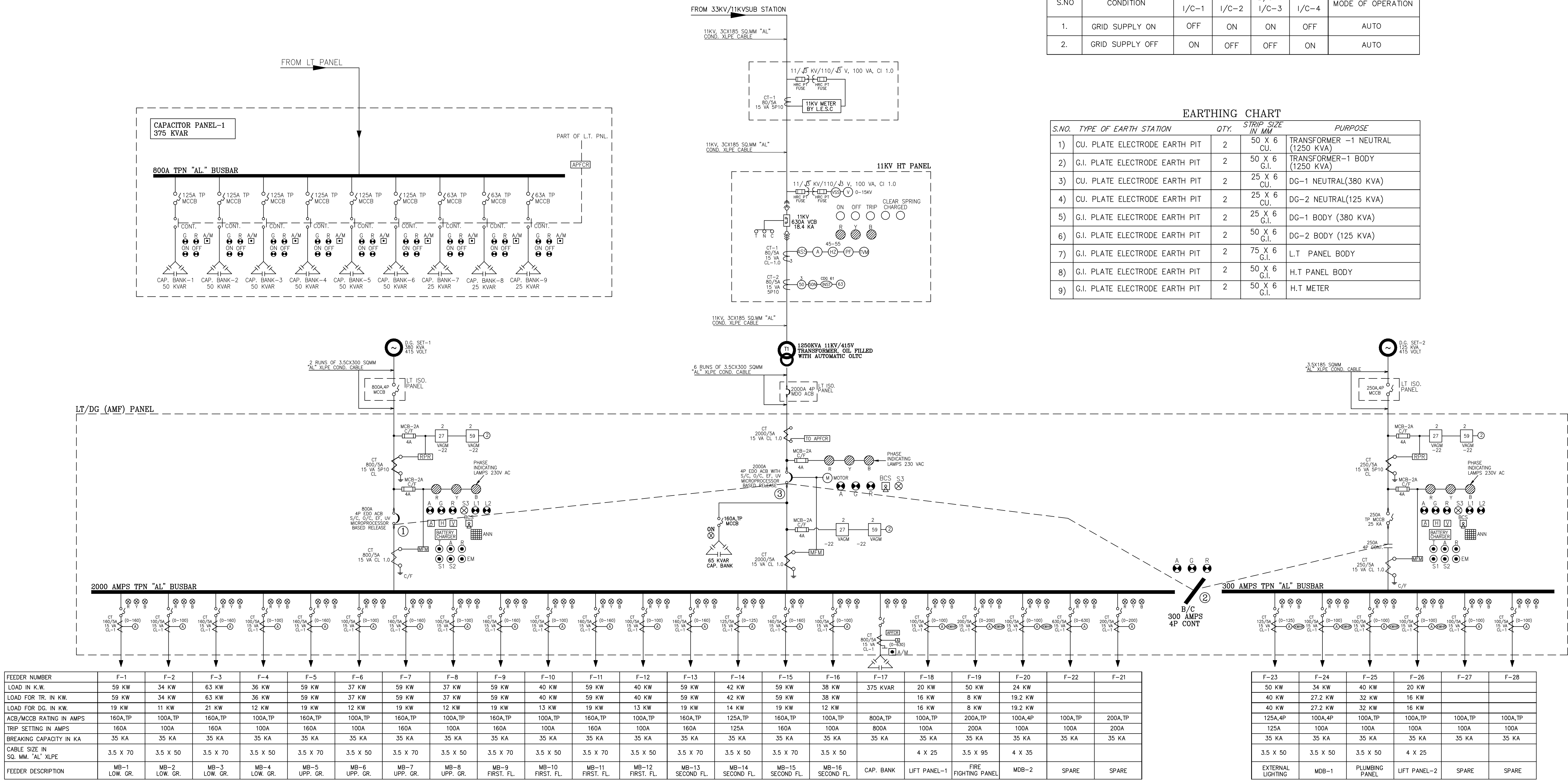
| S.NO | CONDITION | DG-1 I/C-1 | TR-1 I/C-2 | B/C-1 I/C-3 | DG-2 I/C-4 | MODE OF OPERATION |
|------|-----------------|------------|------------|-------------|------------|-------------------|
| 1. | GRID SUPPLY ON | OFF | ON | ON | OFF | AUTO |
| 2. | GRID SUPPLY OFF | ON | OFF | OFF | ON | AUTO |

EARTHING CHART

| S.NO. | TYPE OF EARTH STATION | QTY. | STRIP SIZE IN MM | PURPOSE |
|-------|--------------------------------|------|------------------|-----------------------------------|
| 1) | CU. PLATE ELECTRODE EARTH PIT | 2 | 50 X 6 CU. | TRANSFORMER -1 NEUTRAL (1250 KVA) |
| 2) | G.I. PLATE ELECTRODE EARTH PIT | 2 | 50 X 6 G.I. | TRANSFORMER-1 BODY (1250 KVA) |
| 3) | CU. PLATE ELECTRODE EARTH PIT | 2 | 25 X 6 CU. | DG-1 NEUTRAL(380 KVA) |
| 4) | CU. PLATE ELECTRODE EARTH PIT | 2 | 25 X 6 CU. | DG-2 NEUTRAL(125 KVA) |
| 5) | G.I. PLATE ELECTRODE EARTH PIT | 2 | 25 X 6 G.I. | DG-1 BODY (380 KVA) |
| 6) | G.I. PLATE ELECTRODE EARTH PIT | 2 | 50 G.I. | DG-2 BODY (125 KVA) |
| 7) | G.I. PLATE ELECTRODE EARTH PIT | 2 | 75 X 6 G.I. | LT PANEL BODY |
| 8) | G.I. PLATE ELECTRODE EARTH PIT | 2 | 50 G.I. | H.T. PANEL BODY |
| 9) | G.I. PLATE ELECTRODE EARTH PIT | 2 | 50 X 6 G.I. | H.T. METER |

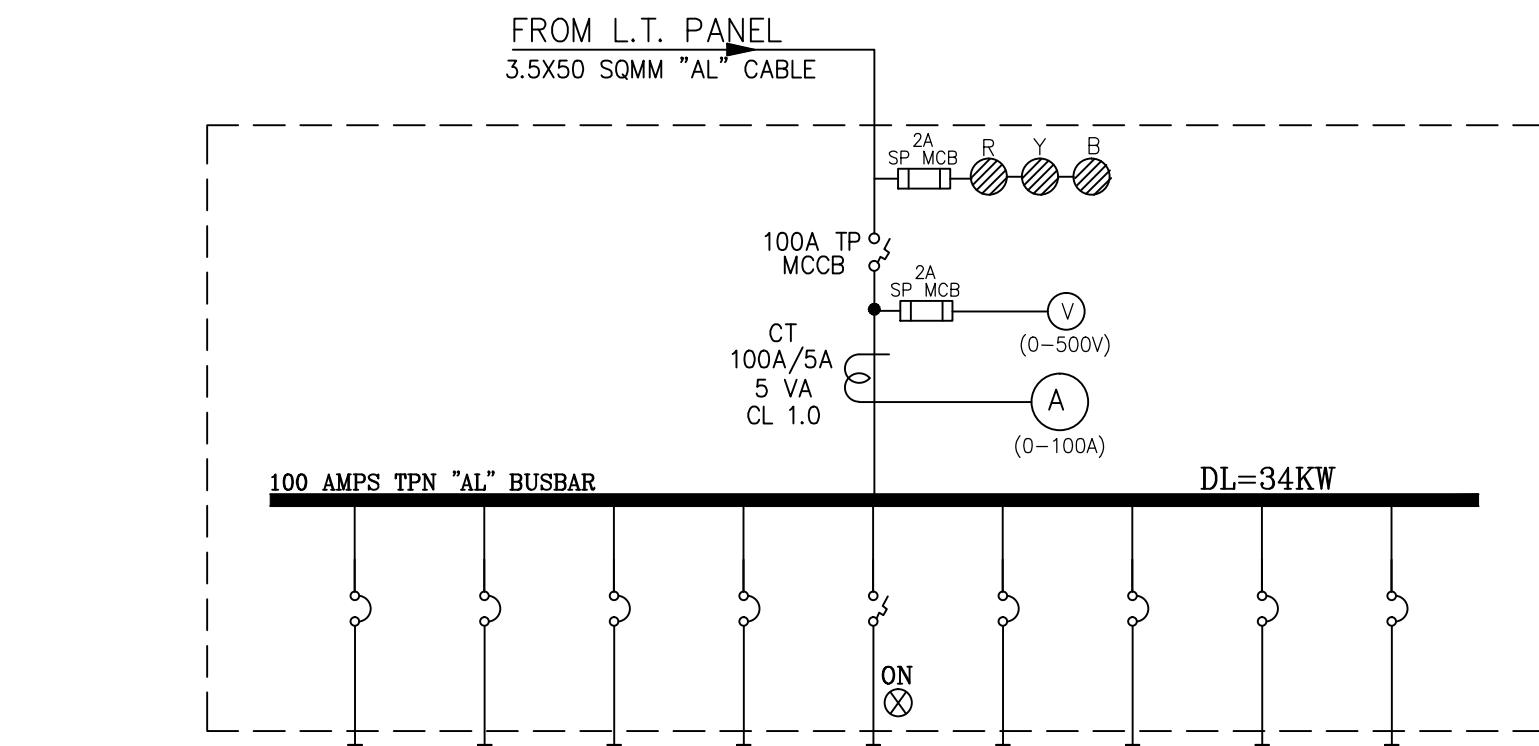
LEGEND

| S.NO. | DESCRIPTION | SYMBOLS |
|-------|---|---------|
| 1 | AMMETER | A |
| 2 | AMMETER SELECTOR SWITCH | ASS |
| 3 | VOLTMETER | V |
| 4 | VOLTMETER SELECTOR SWITCH | VSS |
| 5 | POWER FACTOR METER | PF |
| 6 | FREQUENCY METER | HZ |
| 7 | EARTH FAULT RELAY | SIN |
| 8 | CURRENT TRANSFORMER | CT |
| 9 | PHASE OVERCURRENT RELAY | S1 |
| 10 | UNDER/OVER VOLTAGE RELAY | 27/59 |
| 11 | POTENTIAL TRANSFORMER | PT |
| 12 | TIMER | 2 |
| 13 | TRIP NEUTRAL CLOSE | T N C |
| 14 | INDICATING LAMP | IL |
| 15 | DRAWOUT TYPE | ↔ |
| 16 | MULTI FUNCTION METER (MACH 96) (V/C, KWHR METER) | MFV |
| 17 | MCSB | 5 |
| 18 | REVERSE POWER RELAY | RPR |
| 19 | AUTOMATIC POWER FACTOR CORRECTION RELAY | APFCR |
| 20 | EARTH FAULT RELAY(INSTANTANEOUS) | EN |
| 21 | ANPUMPING RELAY | PN |
| 22 | MASTER TRIP RELAY | MT |
| 23 | AUXILIARY RELAY | AR |
| 24 | OVER CURRENT RELAY(INSTANTANEOUS) | OC |
| 25 | BREAKER OFF GREEN | BOG |
| 26 | BREAKER ON RED | BOR |
| 27 | BREAKER CONTROL SWITCH | BCS |
| 28 | ELECTRICAL DRAW OUT TYPE | EDD |
| 29 | AIR CIRCUIT BREAKER | ACB |
| 30 | DIGITAL TRIVECTOR METER WITH MAXIMUM DEMAND INDICATOR | TVM |
| 31 | PHASE INDICATING LAMP | R Y B |
| 32 | SPRING CHARGED, RED | L1 |
| 33 | DC CONTROL SUPPLY HEALTHY, RED | L2 |
| 34 | DG START PUSH BUTTON, GREEN | S1 |
| 35 | DG STOP PUSH BUTTON, RED | S2 |
| 36 | TRIP/RESET ILLUMINATED PUSH BUTTON, RED | S3 |
| 37 | EMERGENCY STOP PUSH BUTTON | EM |
| 38 | DC AMMETER | A |
| 39 | DC VOLTMETER | V |
| 40 | HOOTER | H |
| 41 | ANN. TEST PUSH BUTTON | T |
| 42 | ANN. ACCEPT PUSH BUTTON | A |
| 43 | ANN. RESET PUSH BUTTON | R |
| 44 | CHANGE OVER SWITCH | C.O.S |
| 45 | NEUTRAL ISOLATION CONTACTOR | NIC |
| 46 | DUAL READING ENERGY METER | DRM |
| 47 | DUAL READING ENERGY METER | DR |



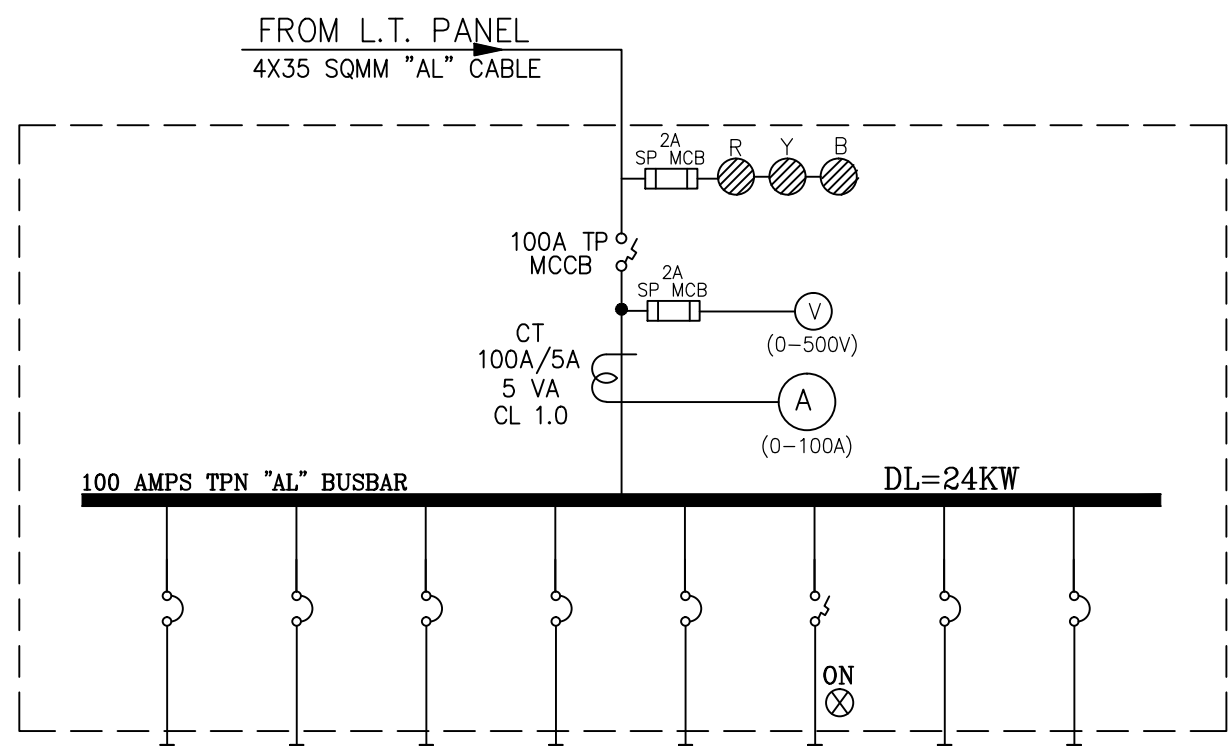
| FEEDER NUMBER | F-1 | F-2 | F-3 | F-4 | F-5 | F-6 | F-7 | F-8 | F-9 | F-10 | F-11 | F-12 | F-13 | F-14 | F-15 | F-16 | F-17 | F-18 | F-19 | F-20 | F-21 | F-22 | F-23 | F-24 | F-25 | F-26 | F-27 | F-28 |
|---------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|-----------|--------------|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| LOAD IN K.W. | 59 KW | 34 KW | 63 KW | 36 KW | 59 KW | 37 KW | 59 KW | 37 KW | 59 KW | 40 KW | 59 KW | 40 KW | 59 KW | 42 KW | 59 KW | 38 KW | 375 KVAR | 20 KW | 50 KW | 24 KW | 16 KW | 8 KW | 19.2 KW | 16 KW | 16 KW | 16 KW | 16 KW | 16 KW |
| LOAD FOR TR. IN KW | 19 KW | 11 KW | 21 KW | 12 KW | 19 KW | 12 KW | 19 KW | 12 KW | 19 KW | 13 KW | 19 KW | 13 KW | 19 KW | 14 KW | 19 KW | 12 KW | 8 KW | 19.2 KW | 16 KW | 16 KW | 16 KW | 16 KW | 16 KW | 16 KW | 16 KW | 16 KW | 16 KW | 16 KW |
| ACB/MCSB RATING IN AMPS | 160A,TP | 100A,TP | 160A,TP | 100A,TP | 160A,TP | 100A,TP | 160A,TP | 100A,TP | 160A,TP | 100A,TP | 160A,TP | 100A,TP | 160A,TP | 125A,TP | 160A,TP | 100A,TP | 800A,TP | 100A,TP | 200A,TP | 100A,TP | 100A,TP | 100A,TP | 100A,TP | 100A,TP | 100A,TP | 100A,TP | 100A,TP | 100A,TP |
| TRIP SETTING IN AMPS | 160A | 100A | 160A | 100A | 160A | 100A | 160A | 100A | 160A | 100A | 160A | 100A | 160A | 125A | 160A | 100A | 800A | 100A | 200A | 100A | 100A | 100A | 100A | 100A | 100A | 100A | 100A | 100A |
| BREAKING CAPACITY IN KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA | 35 KA |
| CABLE SIZE IN SQ. MM. 'AL' XLPE | 3.5 X 70 | 3.5 X 50 | 3.5 X 70 | 3.5 X 50 | 3.5 X 70 | 3.5 X 50 | 3.5 X 70 | 3.5 X 50 | 3.5 X 70 | 3.5 X 50 | 3.5 X 70 | 3.5 X 50 | 3.5 X 70 | 3.5 X 50 | 3.5 X 70 | 3.5 X 50 | 4 X 25 | 35 X 95 | 4 X 35 | 4 X 35 | 4 X 35 | 4 X 35 | 4 X 35 | 4 X 35 | 4 X 35 | 4 X 35 | 4 X 35 | 4 X 35 |
| FEEDER DESCRIPTION | MB-2 LOW GR. | MB-2 LOW GR. | MB-3 LOW GR. | MB-4 LOW GR. | MB-5 UPP. GR. | MB-6 UPP. GR. | MB-7 UPP. GR. | MB-8 UPP. GR. | MB-9 FIRST FL. | MB-10 FIRST FL. | MB-11 FIRST FL. | MB-12 FIRST FL. | MB-13 SECOND FL. | MB-14 SECOND FL. | MB-15 SECOND FL. | CAP. BANK | LIFT PANEL-1 | MB-16 FIGHTING PANEL | MB-2 | SPARE | SPARE | SPARE | SPARE | SPARE | SPARE | SPARE | SPARE | SPARE |

MAIN SCHEMATIC DIAGRAM



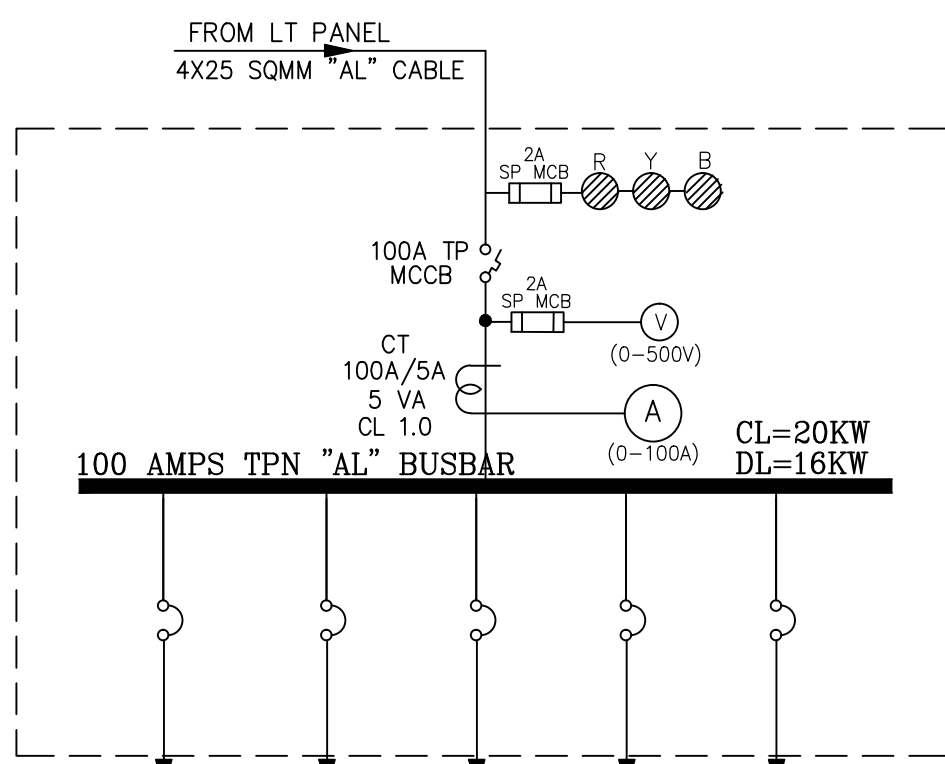
| FEEDER NUMBER | F-1 | F-2 | F-3 | F-4 | F-5 | F-6 | F-7 | F-8 | F-9 |
|----------------------------|--------------|--------------|----------------|----------------|-----------|----------------|-----------------|------------|--------|
| LOAD IN K.W. | 2.25 KW | 2.25 KW | 2.25 KW | 2.25 KW | 10 KW | 15 KW | 15 KW | 15 KW | 15 KW |
| M.C.C.B. RATING IN AMPS | 63A | 63A | 63A | 63A | 100A,TP | 63A,AP | 63A | 63A | 63A |
| TRIP SETTING IN AMPS | 4P MCB | 4P MCB | 4P MCB | 4P MCB | 63A | 4P MCB | 4P MCB | 4P MCB | 4P MCB |
| BREAKING CAPACITY IN KA | 10 KA | 10 KA | 10 KA | 10 KA | 25 KA | 10 KA | 10 KA | 10 KA | 10 KA |
| CABLE SIZE IN SQ. MM. XLPE | 4 X 10 | 4 X 10 | 4 X 10 | 4 X 10 | 4 X 16 | 4 X 16 | 4 X 16 | 4 X 16 | 4 X 16 |
| FEEDER DESCRIPTION | MB-1 LOW GR. | MB-1 LOW GR. | MB-1 FIRST FL. | MB-1 FIRST FL. | ESCALATOR | MB-1 FIRST FL. | MB-1 SECOND FL. | CAR LIFT-1 | SPARE |

SCHEMATIC DIAGRAM FOR MB-1 (LOWER GROUND FL.)



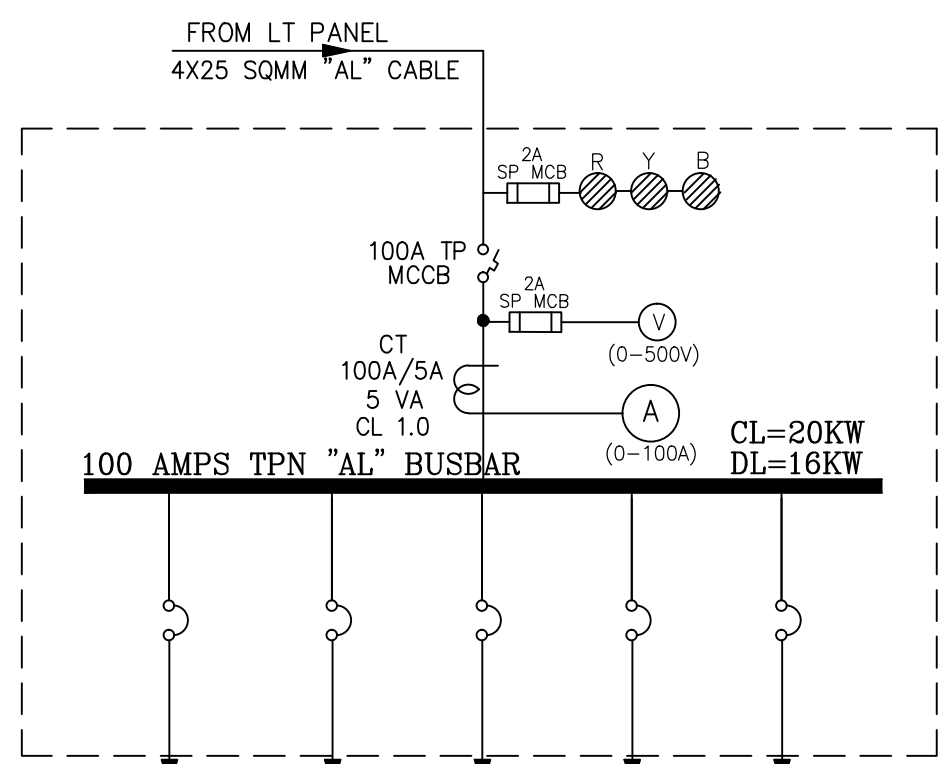
| FEEDER NUMBER | F-1 | F-2 | F-3 | F-4 | F-5 | F-6 | F-7 | F-8 |
|----------------------------|--------------|--------------|----------------|----------------|-------------|---------|--------|--------|
| LOAD IN K.W. | 2.25 KW | 2.25 KW | 2.25 KW | 2.25 KW | 15 KW | 15 KW | 15 KW | 15 KW |
| M.C.C.B. RATING IN AMPS | 63A | 63A | 63A | 63A | 63A,AP | 100A,TP | 63A | 63A |
| TRIP SETTING IN AMPS | 4P MCB | 4P MCB | 4P MCB | 4P MCB | 63A | 4P MCB | 4P MCB | 4P MCB |
| BREAKING CAPACITY IN KA | 10 KA | 10 KA | 10 KA | 10 KA | 25 KA | 10 KA | 10 KA | 10 KA |
| CABLE SIZE IN SQ. MM. XLPE | 4 X 10 | 4 X 10 | 4 X 10 | 4 X 10 | 4 X 16 | 4 X 16 | 4 X 16 | 4 X 16 |
| FEEDER DESCRIPTION | MB-2 LOW GR. | MB-2 LOW GR. | MB-2 FIRST FL. | MB-2 FIRST FL. | CAP. LIFT-2 | SPARE | SPARE | SPARE |

SCHEMATIC DIAGRAM FOR MB-2 (LOWER GROUND FL.)



| FEEDER NUMBER | F-1 | F-2 | F-3 | F-4 | F-5 |
|--------------------------------|-------------|-------------|------------------|--------|--------|
| LOAD IN K.W. | 10 KW | 10 KW | 10 KW | 63A | 63A |
| M.C.C.B./M.C.B. RATING IN AMPS | 63A,AP | 63A,AP | 40A | 63A | 63A |
| TRIP SETTING IN AMPS | RCBO(300mA) | RCBO(300mA) | DP MCB | 4P MCB | 4P MCB |
| BREAKING CAPACITY IN KA | 10 KA | 10 KA | 10 KA | 10 KA | 10 KA |
| CABLE SIZE IN SQ. MM. XLPE | 4 X 10 | 4 X 10 | 4 X 10 | 4 X 10 | 4 X 10 |
| FEEDER DESCRIPTION | LIFT-1 | LIFT-2 | DB(LAP) M/C ROOM | SPARE | SPARE |

SCHEMATIC DIAGRAM FOR LIFT PANEL-1



| FEEDER NUMBER | F-1 | F-2 | F-3 | F-4 | F-5 |
|--------------------------------|-------------|-------------|------------------|--------|--------|
| LOAD IN K.W. | 10 KW | 10 KW | 10 KW | 63A | 63A |
| M.C.C.B./M.C.B. RATING IN AMPS | 63A,AP | 63A,AP | 40A | 63A | 63A |
| TRIP SETTING IN AMPS | RCBO(300mA) | RCBO(300mA) | DP MCB | 4P MCB | 4P MCB |
| BREAKING CAPACITY IN KA | 10 KA | 10 KA | 10 KA | 10 KA | 10 KA |
| CABLE SIZE IN SQ. MM. XLPE | 4 X 10 | 4 X 10 | 4 X 10 | 4 X 10 | 4 X 10 |
| FEEDER DESCRIPTION | LIFT-3 | LIFT-4 | DB(LAP) M/C ROOM | SPARE | SPARE |

SCHEMATIC DIAGRAM FOR LIFT PANEL-2

REMARKS

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MAIN SCHEMATIC DIAGRAM

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Scale: N.T.S

Date: 05/03/2012

Drawn: Dinesh

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