

EQPT. NUMBERING SYSTEM :

| | | |
|-----------------|-----------------------------|---|
| KV LEVEL | EQPT. IDENTIFICATION | ADDITIONAL INFORMATION FOR ISO (89): |
| 1 - FOR 132 kV | 89 - FOR ISO | A - FOR MAIN BUS |
| 2 - FOR 220 kV | 52 - FOR CB | B - FOR TRANSFER BUS |
| 3 - FOR 33 kV | | L - FOR LINE |
| | | T - FOR TRAF. (Transformer) |
| | | E - WITH E/S |

BAY NO.
00 - FOR BUS

(e.g. : 1-01-CT = 132 KV - Bay No. 01 - CT
1-02-89LE = 132 KV - Bay No. 02 - Line ISO With 1 E/S)

132 kV EQUIPMENTS :

| SL. NO. | DESCRIPTION | RATING | LEGENDS |
|---------|--|--|----------|
| 1 | SF6 Circuit Breaker (CB) | 132 kV, 1250A, 31.5 kA (3 Sec.) 3 Ph. | [Symbol] |
| 2 | Power Transformer (Not in scope of Win Power) | 132/33 kV, 3 Ph. | [Symbol] |
| 3 | HCB Isolator w/o Earth Switch | 132 kV, 1250A, 31.5 kA (1 Sec.) 3 Ph. | [Symbol] |
| 4 | HCB Isolator with 1 Earth Switch | 132 kV, 1250A, 31.5 kA (1 Sec.) 3 Ph. | [Symbol] |
| 5 | HCB Isolator w/o Earth Switch (Tandem Type) | 132 kV, 1250A, 31.5 kA (1 Sec.) 3 Ph. | [Symbol] |
| 6 | Lightning Arrestor (LA) | 120 kV, 10 kA, Gapless Metal (Zinc) Oxide, 1 Ph. | [Symbol] |
| 7 | Coupling Capacitor with Potential Device (CVT) | 132 kV, 1 Ph, 4400pF | [Symbol] |
| 8 | Voltage Transformer (VT) | 132 kV, 1 Ph, 2 Core | [Symbol] |
| 9 | Current Transformer (CT) | 132 kV, 1 Ph, 3 Core | [Symbol] |
| 10 | Wave Trap (WT) | 132 kV, 800 A, 10 kA, 0.2mH, 1 Ph. | [Symbol] |

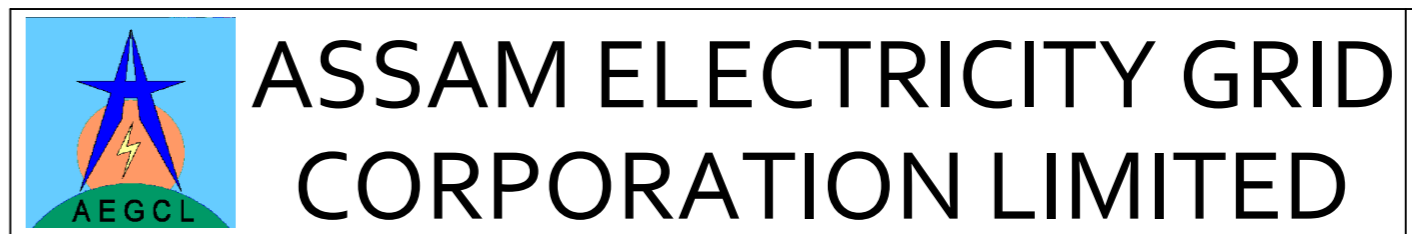
33 kV EQUIPMENTS :

| SL. NO. | DESCRIPTION | RATING | LEGENDS |
|---------|----------------------------------|---|----------|
| 1 | SF6 Circuit Breaker (CB) | 33 kV, 1250A, 25 kA (3 Sec.) 3 Ph. | [Symbol] |
| 2 | HDB Isolator w/o Earth Switch | 33 kV, 1250A, 25 kA (1 Sec.) 3 Ph. | [Symbol] |
| 3 | HDB Isolator with 1 Earth Switch | 33 kV, 1250A, 25 kA (1 Sec.) 3 Ph. | [Symbol] |
| 4 | Lightning Arrestor (LA) | 30 kV, 10 kA, Gapless Metal (Zinc) Oxide, 1 Ph. | [Symbol] |
| 5 | Current Transformer (CT) | 33 kV, 1 Ph | [Symbol] |
| 6 | Voltage Transformer (VT) | 33 kV, 1 Ph, 2 Core | [Symbol] |

NOTE :

1. THE PARAMETERS FOR WHICH THE SAME IS DESIGNED :

| DESCRIPTION | VALUE | VALUE |
|--|---------------|-------------|
| Nominal System Voltage (kV) | 132 | 33 |
| Highest System Voltage (kV) | 145 | 36 |
| Lightning impulse Withstand Voltage (kVp) | 650 | 170 |
| Power Frequency Withstand Voltage, kV(rms) | 230 | 70 |
| maximum fault Level | 31.5 kA/1 Sec | 25 kA/1 Sec |
| Creepage Distance (Min.) | 3625 mm | 900 mm |



BARPETA 132/33 KV SUBSTATION

DRAWING_TITLE
SINGLE LINE DIAGRAM

DRAWING_NUMBER
AEGCL/Barpeta/SLD/01

SHEET
1 OF 1

Trafo-2 has not arrived yet

Currently not in use