

TIEPCO – UNIT SUBSTATIONS

The TIEPCO **Unit** Substation conforms to the latest IEC and prevailing utility standard (32-SDMS-01) and is designed and manufactured utilizing the in house expertise and state of the art technology.

TIEPCO manufactured Unit substation has following salient features:

- Is up to 17.5KV on HV side and up to 400V on LV side
- Main busbar rating up to 400A on HV side and up to 4000A on LV side.
- Upto 1500 kVA



Unit Substation Comprises Of Two Sections:

| A-TRANSFORMER SECTION | | | | | | | | |
|---|------------------------|----------|----------|----------|----------|----------|----------|----------|
| Rated Voltage | 17.5KV | | | | | | | |
| Rated Capacity | 1500 KVA | | | | | | | |
| Rated Primary Voltage | 13.8KV | | | | | | | |
| Rated Secondary Voltage | UP TO 400V AC | | | | | | | |
| Cooling | ONAN | | | | | | | |
| Paint | RAL7033 | | | | | | | |
| B- LOW VOLTAGE COMPARTMENT | | | | | | | | |
| Having LV Switchgear As Per Rating Of Transformer Enunciated below: | | | | | | | | |
| COMPONENTS | UNIT SUBSTATION RATING | | | | | | | |
| | 300kVA | | 500kVA | | 1000kVA | | 1500kVA | |
| | 231/133V | 400/231V | 231/133V | 400/231V | 231/133V | 400/231V | 231/133V | 400/231V |
| LV Panel Incoming Busbar / Link rating – min. (A) | 800 | 500 | 1600 | 800 | 3000 | 1600 | 4000 | 2500 |

| | | | | | | | | |
|--|-------|-------|--------|-------|--------|--------|--------|--------|
| CT rating on incoming Busbar (A) | 750/5 | 750/5 | 1500/5 | 750/5 | 3000/5 | 1500/5 | 4000/5 | 3000/5 |
| Number of Outgoing MCCB,s rated 400A | 2 | 1 | 4 | 2 | 6 | 4 | 7 | 5 |
| Provision of space for Spare MCCBs | 2 | 1 | 4 | 2 | 6 | 4 | 7 | 5 |
| Phase Busbar min. rating (A) | 800 | 500 | 1600 | 800 | 3000 | 1600 | 4000 | 2500 |
| Symmetrical Short Circuit Rating for 2 sec. (rms), kA | 25 | 25 | 25 | 25 | 40 | 25 | 65 | 40 |