



Single-Phase Pole-Mounted Transformer

Transformers are critical components in the electrical distribution network, serving as devices that transfer electrical energy between two or more circuits through electromagnetic induction. Among the various types of transformers, pole mounted transformers stand out for their specific application and installation.

Yongjia-Pole mounted transformers are a common sight in suburban and rural areas, where they become pivotal in bridging the gap between high-voltage transmission lines and the consumer. Their design and installation cater to the need for efficiency, safety, and reliability in power distribution.

General Specifications

Sizes (kVA)	15, 25, 37.5, 50, 75, 100, 167, 250, 333
Frequency	60 Hz or 50 Hz
Cooling Class	ONAN or KNAN
Temp Rise	55°C, 65°C, 55/65°C
Primary Voltages	15 kV or 35 kV
Secondary Voltage	120/240/480 V
Tapping Range	±2 x 2.5 % on HV-Side
Impedance	1.0 – 3.0 %
Efficiency	DOE Efficiency Standard
IEEE Standards	C57.12.00, C57.12.20, C57.12.31, C57.12.35, C57.12.90, C57. 91 and C57.154

Optional Features

- HV taps (external lever handle or hook stick handle)
- Dual voltage
- Pressure relief device
- Internal fuses
- Switches
- Secondary circuit breaker
- Lightning arresters
- Environmentally friendly, high fire-point FR3 oil
- IFD (Internal Fault Detector)
- Copper windings
- Stainless steel tank





Standard Testing

Testing in accordance with all applicable IEEE C57.12.00 & IEEE C57.12.90 (Liquid-Immersed) standards

- Leak Test
- Full-wave Impulse Testing
- No Load Loss and Excitation Current
- Polarity and Phase Relation
- Ratio Test
- Load Loss and Impedance Voltage
- Resistance Measurements
- Induced and Applied Potential

Accessories

- Temperature Gauge
- Pressure Vacuum Gauge
- Externally-operable tap changer switches
- Lifting Lugs
- Pressure Relief Valve
- Protective Link
- Liquid Level Gauge
- Drain/Sampling Valve
- Surge Arrester
- Current Limiting Fuse
- Low Voltage Circuit Breaker
- Aluminum Nameplate

Use Cases of Pole-Mounted Transformers

Residential Areas:

They step down the high voltage from utility lines to levels suitable for home appliances, ensuring safe and efficient power delivery to residential areas.



Rural Electrification:

Their deployment is crucial in rural electrification, bringing electricity to remote areas where laying underground cables is not feasible or too expensive.



Street Lighting:

Pole-mounted transformers are used to power street lights, providing the necessary voltage for lighting up roads and public spaces during the night.



Light Commercial Applications:

Small businesses and light commercial facilities often rely on these transformers for their electricity needs, benefiting from the transformer's ability to provide stable and reliable power.

