

# 220kV Three-Phase Oil-Immersed On-Load Tap-Changing Power Transformer

This 220kV transformer is characterized by its compact size, light weight, high efficiency, and low noise, ensuring reliable operation. It reduces power grid consumption and operational costs.



## Overview

### General description

The 220kV level Oil Immersed On-load Regulation Power Transformer has a series of big change in material, technical and construction with the characters of small size light weight, high efficiency with low loss and low noise, stable operation which cutting down large number of loss from Energy GRID and operation charge, improving the industrial economic benefit. It is used in power plant, transformer substation, big sized and chemistry factory and etc.

This product is according to National Standard: GB1094.1-1996 'Power transformer General Principle Part 1', GB1094.2-1996 'Power Transformer Part2: Temperature Rise', GB 1094.3-2003 'Power Transformer Part3: Insulation Level, Insulation Test and exterior air gap clearance', GB1094.5-2003 'Power Transformer Part 5: Ability to withstand short circuit', GB 16451-2008 'Three phase Oil Immersed Power Transformer Technical Data Requirement'.

### Environment conditions

Mounting Type: Outdoor  
Ambient temperature: Highest air temperature +40°C; lowest air temperature -25°C; highest monthly average air temperature +30°C; highest annual average air temperature +20°C; water temperature at the water inlet of the water cooler is +25°C

Altitude: <1000m (altitude >1000m, the temperature rise will be different as normal)  
Relative humidity: <90% (25°C)  
Requirement of Mounting Place: where without corrosive gas and obvious dust etc.  
When inquiring or ordering, additional details are required for special service conditions

High-efficiency 220kV power transformer designed for substations and industrial facilities.

## High-Efficiency Power Transformer

This 220kV three-phase oil-immersed power transformer is engineered for reliable power transmission and distribution. Designed for high efficiency, it features low noise and low-loss operation, which significantly reduces energy consumption and operational costs for power grids. Equipped with on-load tap-changing capability, it ensures stable voltage regulation without interrupting power supply.

## Technical Specifications

### Standards Compliance

- GB1094.1-1996 (General Principle)
- GB1094.2-1996 (Temperature Rise)
- GB1094.3-2003 (Insulation Level)
- GB1094.5-2003 (Short Circuit Withstand)
- GB/T6451-2008 (Technical Data)

Voltage Class	220kV
Circulation/Cooling Method	ONAN, ONAF, Water Cooling

## Environmental Conditions

Operational Altitude	1000 m
Ambient Temperature Range	-25°C to +40°C
Mounting Type	Outdoor
Max Relative Humidity	90 %

## Performance Data

### Typical Technical Table

Rated Capacity (kVA)	No-Load Loss (kW)	Load Loss (kW)
31500	22.5	102.6
63000	37.8	179.5
120000	57.6	292.6
240000	93.6	513.0