

20kV Three-Phase Oil-Immersed Distribution Transformer

This three-phase oil-immersed distribution transformer is designed for efficient voltage transformation in power distribution networks. It features robust construction for outdoor installation and an optimized core and winding design for minimal losses.



ADDITIONAL IMAGES



Overview

High-Efficiency 20kV Oil-Immersed Distribution Transformer

This series of three-phase, oil-immersed distribution transformers is engineered for reliable voltage transformation in power distribution networks ranging from 30kVA to 2500kVA. Designed with optimized core and winding geometry to minimize energy losses, these units ensure stable power delivery for diverse industrial, commercial, and residential applications. The robust, weather-resistant construction includes advanced cooling fins for effective heat dissipation, providing long-term operational durability and performance.

Technical Specifications

Rated Capacity	30 - 2500 kVA
Voltage Combination	HV: 20 kV / LV: 0.4 kV
HV Tap Range	±5% (Optional: ±2 x 2.5%)
Vector Group Symbols	Dyn11, Yzn11, Yyn0

Performance Data

S11 series 20KV oil-immersed distribution transformer

30kVA - 2500kVA Three-phase duplex winding non-excited tap-changing distribution transformer

Rated capacity kVA	Voltage Combination and Tap range			Vector group Symbol	No-load loss kW	Load loss kW	No-load current %	Short-circuit impedance voltage %
	HV kV	HV Tap Range %	LV kV					
30					0.18	0.04606	2.1	
50					0.12	0.05096	2.0	
63					0.15	0.20115	1.9	
80					0.18	0.44137	1.8	
100					0.20	0.75145	1.6	
125					0.24	0.90166	1.5	
160					0.29	1.24242	1.4	
200					0.34	1.60136	1.3	
250					0.40	1.92135	1.2	
315	30	+5	04	Dyn11	0.48	2.31401	1.1	55
400					0.57	2.77173	1.0	
500					0.66	2.94766	1.0	
630					0.81	3.42	0.9	
800					0.98	4.12	0.8	
1000				1.15	4.93	0.7		
1250				1.38	5.29	0.7	40	
1600				1.66	5.92	0.6		
2000				1.95	6.64	0.6		
2500				2.34	7.52	0.6		

Note 1: Rated capacity 500kV and below transformer, the load loss above the oblique line in the table applies to Dyn11 or Yzn11; the load loss below the oblique line applies to Yyn0.

Note 2: According to requirements, the transformer can supply HV tap change ±2 X 2.5% or other change range.

Performance characteristics and capacity specifications for 30kVA to 2500kVA models.

Transformer Performance Metrics

Capacity (kVA)	No-Load Current (%)	Impedance Voltage (%)
30	2.1	4
100	1.6	4.5
500	1	4.5
1000	0.7	6
2500	0.5	6

Construction

Cooling System

Oil-Immersed • Cooling Fins

Installation

Outdoor