

35kV POWER TRANSFORMER



SUMMARY

The 35kV transformer, the use of company- specific calculation and verification procedures, the transformer core, coils, active part, leading tanks and other components for a full range of optimized design and verification, to ensure product performance. Superior technology equipment, careful selection of materials, and efficient manufacturing make the transformer small, light weight, low loss, low PD, low noise and other characteristics of superior product quality, energy saving and environmental protection, reliable operation and effectively reduce the Product operating costs.

Environmental Conditions

1. Type: outdoor
2. Ambient temperature: max. Temperature: +40°C; min. temperature: -30°C
3. Altitude: $\leq 1000\text{m}$ (temperature rise shall be corrected when 1000m)
4. Relative humidity: $\leq 90\%$ (25°C)
5. Installation place: without corrosive gas and apparent fouling.

35kV POWER TRANSFORMER

35kV Three-phase Double Windings NLTC Power Transformer

Rated capacity (kVA)	Voltage combination and range of tapping			Vector group	No-load loss (kW)	Load loss (kW)	No-load current (%)	Short circuit impedance (%)
	HV	range of tapping	LV					
630	35	±2×2.5%	3.15	Yd11	0.83	7.86	0.65	6.5
800					0.98	9.40	0.65	
1000					1.15	11.5	0.65	
1250					1.40	13.9	0.55	
1600					1.69	16.6	0.45	
2000					2.17	18.3	0.45	
2500					2.56	19.6	0.45	
3150					3.04	23.0	0.45	
4000			3.61	27.3	0.45	7.0		
5000			4.32	31.3	0.45			
6300			5.24	35.0	0.45			
8000			7.20	38.4	0.35			
10000			8.70	45.3	0.35	8.0		
12500			10.0	53.8	0.30			
16000			12.1	65.8	0.30			
20000			14.4	79.5	0.30			
25000	17.0	94.0	0.25	10.0				

35kV Three-phase Double Windings OLTC Power Transformer

Rated capacity (kVA)	Voltage combination and range of tapping			Vector group	No-load loss (kW)	Load loss (kW)	No-load current (%)	Short circuit impedance (%)
	HV	range of tapping	LV					
2000	35	±3×2.5%	3.15	Yd11	2.30	19.2	0.50	6.5
2500					2.72	20.6	0.50	
3150					3.23	24.7	0.50	
4000					3.87	29.1	0.50	
5000					4.64	34.2	0.50	
6300					5.63	36.7	0.40	
8000			7.87	40.6	0.40	8.0		
10000			9.28	48.0	0.35			
12500			10.9	56.8	0.35			
16000			13.1	70.3	0.35			
20000			15.5	82.7	0.30			
25000			18.3	97.8	0.30			
31500			21.8	116	0.30		10.0	

Above mentioned parameter are only for reference, WESTINGHOUSE is able to design products according to specific requirements from end users.

35kV POWER TRANSFORMER

35kV Three-phase Double Windings NLTC Distribution Transformer

Rated capacity (kVA)	Voltage combination and range of tapping			Vector group	No-load loss (kW)	Load loss (kW)	No-load current (%)	Short circuit impedance (%)
	HV	range of tapping	LV					
50	33/35	$\pm 2 \times 2.5\%$	0.4	Dyn11	0.16	1.20	1.3	6.5
100					0.23	2.01	1.1	
125					0.27	2.37	1.1	
160					0.28	2.82	1.0	
200					0.34	3.32	1.0	
250					0.40	3.95	0.95	
315					0.48	4.75	0.95	
400					0.58	5.74	0.85	
500					0.68	6.91	0.85	
630					0.83	7.86	0.65	
800					0.98	9.40	0.65	
1000					1.15	11.5	0.65	
1250					1.40	13.9	0.60	
1600					1.69	16.6	0.60	
2000					1.99	19.7	0.55	
2500					2.36	23.2	0.55	

