



Oil-Immersed

35kV Oil-Immersed Power Transformer (S9 / SFZ9)

This 35kV power-transformer series is widely used in 35kV substations and large / medium industrial enterprises. Rationally structured, highly reliable and markedly energy-saving, it complies with GB 1094-1996 (equivalent to IEC 76-1993) and GB/T 6451-1995, and its electrical performance exceeds products built to current national standards — total losses are 15–25% below the national-standard limits, reaching the advanced level of comparable international products.

MODEL DESIGNATION

SFZ9 - □/35

S	three-phase	F	forced-air cooled (omitted = ONAN oil-immersed self-cooled)
Z	on-load tap-changing (omitted = off-circuit)	9	design series
□/□	rated capacity (kVA) / voltage class (kV)		

TECHNICAL SPECIFICATIONS

Model	S9 / SFZ9 (on-load tap-changing)
HV voltage	35 kV (38.5 kV) $\pm 2 \times 2.5\%$
LV voltage	10 / 6.3 / 0.4 kV
Rated capacity	800 – 16000 kVA
Connection	Yd11 (≤ 6300 kVA) / YNd11 (≥ 8000 kVA)
No-load loss	1.25 – 14.5 kW
Load loss	10 – 70 kW
No-load current	1.05% – 0.5%
Short-circuit impedance (UK)	6.5% / 7.0% / 7.5% / 8.0%
Cooling	ONAN / ONAF
Core	Cold-rolled grain-oriented silicon steel
Standards	GB 1094 / GB/T 6451 / IEC 60076

RATINGS & LOSSES

Representative data for the 35kV S9 three-phase series (HV 35 / 38.5 kV, LV 10 / 6.3 kV). Figures are typical and confirmed against the specific rating at order.

Capacity (kVA)	No-load loss (kW)	Load loss (kW)	No-load current (%)	Impedance Uk (%)	Connection
800	1.25	10	1.05	6.5	Yd11
1000	1.5	12	1.0	6.5	Yd11
1250	1.8	14	0.9	6.5	Yd11
1600	2.1	17	0.85	6.5	Yd11
2000	2.6	19	0.75	6.5	Yd11
2500	3.1	21	0.75	6.5	Yd11
3150	3.8	24.5	0.7	6.5	Yd11
4000	4.6	29	0.7	7.0	Yd11
5000	5.5	33	0.6	7.0	Yd11
6300	6.6	37	0.6	7.0	Yd11
8000	8.5	42	0.55	7.5	YNd11
10000	10	48.3	0.55	7.5	YNd11
12500	12	57.3	0.5	8.0	YNd11
16000	14.5	70	0.5	8.0	YNd11