



Oil-Immersed

S11-M Fully-Sealed Distribution Transformer

The S11-M series fully-sealed distribution transformer is used in AC 50Hz power systems with a rated working voltage of 10kV / 20kV and below — serving as the distribution transformer for petroleum, metallurgy, chemical, textile, light-industry and other enterprises and dusty sites. Its fully-sealed construction isolates the oil from the air, preventing oil deterioration and insulation ageing for reliable, maintenance-free operation.

MODEL DESIGNATION

S 11 - M - □/□

S three-phase
M fully sealed

11 design (performance) series
□/□ rated capacity (kVA) / voltage class (kV)

TECHNICAL SPECIFICATIONS

Rated voltage	6 / 10 kV
Rated capacity	30 – 2000 kVA
LV voltage	0.4 kV
Connection	Dyn11 / Yyn0
Tap range	±5%
Cooling	ONAN (oil-immersed, self-cooled)
Core	Imported cold-rolled grain-oriented silicon steel
Windings	Oxygen-free copper
Standards	GB 1094 / GB/T 6451 / GB/T 25289 / IEC 60076

KEY FEATURES

- ▶ Core stacked from imported high-quality cold-rolled silicon steel and bound for tightness — greatly cuts no-load loss and no-load current, and lowers noise
- ▶ Dyn11 connection reduces harmonic impact on the grid and improves supply quality
- ▶ Measured noise level below the national standard
- ▶ Oxygen-free copper windings: LV ≤ 500 kVA double-layer cylindrical, ≥ 630 kVA double / four-helix; HV multi-layer cylindrical
- ▶ Fully-sealed structure — long service life, no core-lifting, maintenance-free

NORMAL OPERATING ENVIRONMENT

- ▶ Maximum ambient temperature +40 °C; minimum –25 °C
- ▶ Maximum monthly average relative humidity 90% (at +20 °C)
- ▶ Free of fire / explosion hazard, severe pollution, chemical corrosion and violent vibration
- ▶ Altitude below 1000 m
- ▶ Indoor or outdoor installation

RATINGS & LOSSES

S11-M oil-immersed sealed distribution transformer — HV 6/6.3/10/10.5/11 kV, LV 0.4 kV, vector group Dyn11 / Yyn0. Load-loss figures to GB/T 6451.

Capacity (kVA)	No-load loss (kW)	Load loss (kW)	No-load current (%)	Impedance Uk (%)
10	0.07	0.32	2.1	4
20	0.09	0.5	1.6	4
30	0.1	0.66	0.8	4
50	0.12	0.87	0.75	4
63	0.14	1.04	0.7	4
80	0.175	1.25	0.7	4
100	0.2	1.5	0.65	4
125	0.235	1.8	0.65	4
160	0.27	2.2	0.6	4
200	0.33	2.6	0.55	4
250	0.39	3.05	0.5	4
315	0.465	3.65	0.45	4
400	0.56	4.3	0.4	4
500	0.67	5.15	0.4	4
630	0.81	6.2	0.4	4
800	0.98	7.5	0.35	4
1000	1.15	10.3	0.3	4
1250	1.36	12	0.27	4
1600	1.64	14.5	0.25	4
2000	2.1	17.1	0.2	4