



Amorphous Alloy

SCBH15 Amorphous-Alloy Dry-Type Transformer

The SCBH15 amorphous-alloy dry-type transformer cuts no-load loss by about 75% versus GB/T 10228 Table 4 Group I, and load loss by about 15% versus GB/T 10228 — making it one of the most advanced energy-saving dry-type transformers available. It is used in 10kV-class distribution systems requiring high efficiency and fire safety.

MODEL DESIGNATION

SCBH15 - □/□

S	three-phase	C	resin-cast
B	LV foil winding	H	amorphous-alloy core
15	loss-level code	□/□	rated capacity (kVA) / voltage class (kV)

TECHNICAL SPECIFICATIONS

Rated voltage	6 / 6.3 / 10 / 10.5 / 11 kV
Rated capacity	200 – 2500 kVA
LV voltage	0.4 kV
Connection	Dyn11
Tap range	±2×2.5% or ±5%
No-load loss	0.200 – 1.200 kW
Load loss (120 °C)	2.530 – 18.890 kW
No-load current	1.0% – 0.5%
Short-circuit impedance	4.0% / 6.0% / 8.0%
Core	Amorphous alloy
Standards	GB/T 10228 / IEC 60076-11

KEY FEATURES

- ▶ LV winding of copper foil; HV winding of Class-H high-strength enamelled wire
- ▶ Core wound from amorphous-alloy strip — rectangular section, four-frame five-limb or three-frame three-limb structure
- ▶ Glass-fibre-reinforced epoxy-resin encapsulation — excellent moisture and crack resistance

NORMAL OPERATING ENVIRONMENT

- ▶ Altitude not exceeding 1000 m
- ▶ Supply-voltage waveform approximately sinusoidal; three-phase supply voltages roughly symmetrical
- ▶ Ambient temperature: max +40 °C; min –5 °C; hottest-month average +30 °C; hottest-year average +20 °C
- ▶ Installation environment free of significant pollution; indoor use

RATINGS & LOSSES

SCBH15 amorphous-alloy cast dry-type transformer — ultra-low no-load loss. HV 6/6.3/10/10.5/11 kV, LV 0.4 kV, Dyn11. Load loss at 120 °C. Range from 200 kVA. Per GB/T 10228.

Capacity (kVA)	No-load loss (kW)	Load loss (kW)	No-load current (%)	Impedance Uk (%)
200	0.2	2.53	1	4
250	0.23	2.76	1	4
315	0.28	3.47	0.9	4
400	0.31	3.99	0.8	4
500	0.36	4.88	0.8	4
630	0.42	5.88	0.7	6
800	0.48	6.96	0.7	6
1000	0.55	8.13	0.6	6
1250	0.65	9.69	0.6	6
1600	0.76	11.73	0.6	6
2000	1	14.45	0.5	6
2500	1.2	17.17	0.5	6