

Amorphous Alloy Transformer

Logo & Packaging Customization

Parameter & Drawing Design Customization



OPTIMIZED
PERFORMANCE



HIGH
EFFICIENCY



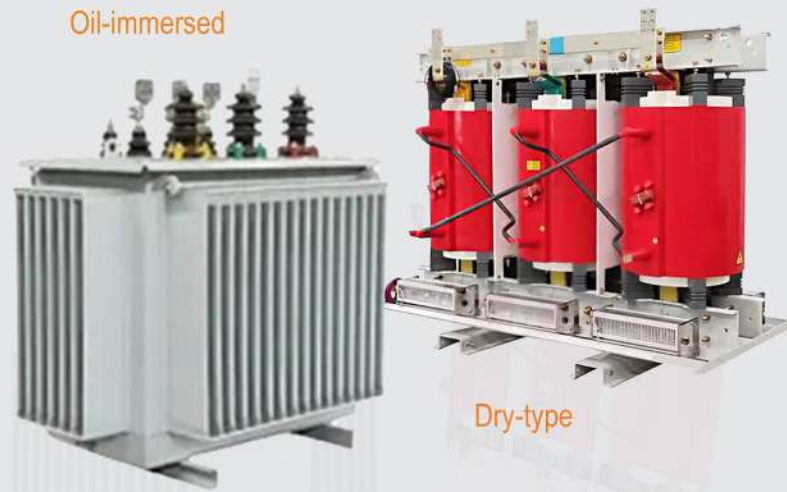
SUPERIOR
SAFETY



ECO
FRIENDLY



MAINTENANCE
FREE



Overview

Ultra-Low Noise Design: The SCBH17 series features a specialized core mounting and resin-coated amorphous alloy strips to drastically reduce magnetostriction. It delivers noise levels significantly below industry standards, making it perfect for residential areas, schools, and hospitals.

Superior Energy Efficiency: Our unique core design minimizes vibration while maintaining peak energy conservation. This model is the preferred choice for urban projects where acoustic comfort and high-efficiency performance are both mandatory requirements.

Advanced Technical Standards: This 3-phase transformer supports customizable primary voltages (10kV/11kV) with a 400V secondary output. Featuring Dyn11 vector groups, it provides superior harmonic suppression and neutral grounding stability.

Compact & Easy Installation: The space-saving footprint allows for easy installation in constrained urban substations. Engineered for durability, it maintains excellent heat dissipation through optimized air cooling.

Application



Hospitals & Data Centers

High Reliability & Uninterrupted Power Supply.

Commercial Office & Malls

Compact Design, Space Saving & Low Noise.



Industrial Parks & Mining

Robust Durability & High Environmental Tolerance for Challenging Environments.

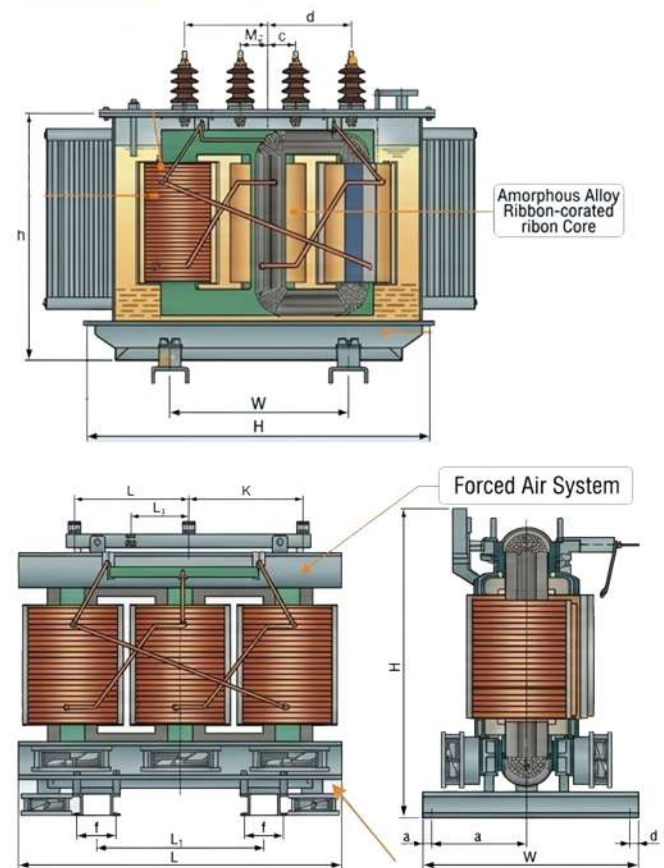


Utility Grids & Rural Areas

Economical Performance, Weather-resistant & Cost-effective Solutions.



Outline Drawing



Accessories / Components



HV & LV
Porcelain Bushings



Cross-flow
Cooling Fans



Digital Temperature
Controller



Off-Circuit
Tap Changer

Technical Parameters

Table 1: Technical Parameters of SCBH15 Series 10kV Amorphous Alloy Dry-Type Transformer
(Ideal for indoor applications with high fire safety requirements)

Rated Capacity (kVA)	No-load Loss (W)	Load Loss at 120°C (W)	No-load Current (%)	Impedance (%)	Noise Level (dB)	Approx. Weight (kg)
30	60	640	0.6	4	≤ 42	350
100	110	1415	0.5	4	≤ 45	650
200	170	2275	0.4	4	≤ 48	1050
400	265	3590	0.3	4	≤ 50	1650
630	350	5365	0.3	6	≤ 52	2250
800	410	6265	0.25	6	≤ 54	2750
1000	470	7315	0.25	6	≤ 55	3200
1250	550	8720	0.2	6	≤ 56	3850
1600	645	10555	0.2	6	≤ 58	4650
2000	850	13005	0.15	6	≤ 60	5650
2500	1020	15445	0.15	6	≤ 62	6650

Table 2: Technical Parameters of SBH15 Series 10kV Amorphous Alloy Oil-Immersed Transformer
(Ideal for utility grids, industrial parks, and outdoor installations)

Rated Capacity (kVA)	No-load Loss (W)	Load Loss at 75°C (W)	No-load Current (%)	Impedance (%)	Oil Weight (kg)	Total Weight (kg)
30	33	600	1.7	4	75	380
100	75	1500	1	4	135	780
200	120	2600	0.7	4	205	1150
400	200	4300	0.5	4	315	1850
630	320	6200	0.3	4.5	420	2450
800	380	7500	0.3	4.5	490	2900
1000	450	10300	0.25	4.5	580	3450
1250	530	12000	0.25	5	690	4100
1600	630	14500	0.2	5	850	5150
2000	800	18100	0.2	5	1050	6350
2500	900	21200	0.15	5	1250	7600

Key Performance Highlights:

- Ultra-Low Loss:** Utilizing amorphous alloy cores, no-load losses are reduced by up to 75% compared to S11/SCB10 series, significantly lowering operational costs.
- Low Temperature Rise:** The high-efficiency core generates minimal internal heat, ensuring stable performance and extending the lifespan of the insulation system.
- Eco-Friendly & Safe:** Dry-type models feature vacuum-cast resin for fire and explosion resistance. Oil-immersed models use a fully sealed corrugated tank, eliminating maintenance and leakage risks.
- Harmonic Suppression:** Dyn11 vector group configuration provides excellent harmonic suppression and neutral grounding stability for sensitive industrial loads.

1. Energy Saving Comparison:

Heading: Why Choose Amorphous Alloy? (Energy Saving Analysis)

Compared to traditional S11/SCB10 silicon steel transformers, Amorphous Alloy cores reduce no-load losses by approximately 70% - 80%.

Capacity (kVA)	Traditional No-load Loss (W)	Amorphous No-load Loss (W)	Annual Energy Saved (kWh)
400	810	200	5,343
1000	1700	450	10,950
2500	3200	900	20,148

2. Customization & Ordering Guide:

Heading: Why Choose Amorphous Alloy? (Energy Saving Analysis)

To provide an accurate quote, please specify the following parameters:

- Rated Capacity:** (e.g., 50kVA to 2500kVA)
- Voltage Ratio:** (High Voltage / Low Voltage, e.g., 10kV / 0.4kV)
- Vector Group:** (e.g., Dyn11, Yyn0)
- Winding Material:** Copper (Standard) or Aluminum
- Protection Level:** IP20 (Indoor) or IP23 (Outdoor Enclosure)
- Special Requirements:** Forced Air Cooling, Temperature Control Box, or Specific Dimensions.

3. Standards & Quality Assurance:

Heading: Quality Commitment & Standards

All Apex Electrics Amorphous Alloy Transformers are strictly manufactured and tested according to international standards:

- IEC 60076: Power Transformers
- ISO 9001: Quality Management System
- CE / RoHS: Compliance for Global Markets
- Warranty:** 24-Month Standard Warranty with lifetime technical support.
- Factory Testing:** Routine tests, Type tests, and Special tests performed before shipment to ensure 100% reliability.



Core Manufacturing Workshop



Automatic Lamination Stacking Machine

1. Standards & Quality Assurance:

Heading: 100% Factory Quality Testing

To ensure maximum reliability and safety, every unit undergoes rigorous testing:

- Routine Tests:** Insulation resistance, winding resistance, and voltage ratio tests.
- Type Tests:** Temperature rise and lightning impulse tests (upon request).
- Special Tests:** Partial discharge measurement and noise level verification.
- Amorphous Core Inspection:** Strict magnetic permeability checks for high-efficiency performance.

2. Packaging & Global Logistics:

Heading: Export Standard Packaging

We provide professional sea-worthy packaging to ensure your equipment arrives in perfect condition:

- Vacuum Sealing:** Moisture-proof and rust-proof protection for long-distance sea freight.
- Reinforced Steel/Wooden Crates:** High-strength frames to prevent mechanical damage during transit.
- Global Shipping:** Extensive experience in shipping to Southeast Asia, Middle East, Africa, and South America.

3. Sustainability & Green Energy:

Heading: Commitment to Sustainability

Our Amorphous Alloy series is designed for a greener future. By reducing no-load losses by up to 80%, we help our clients significantly lower their carbon footprint. Apex Electrics is dedicated to providing efficient power solutions that align with global environmental goals and green energy initiatives.

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