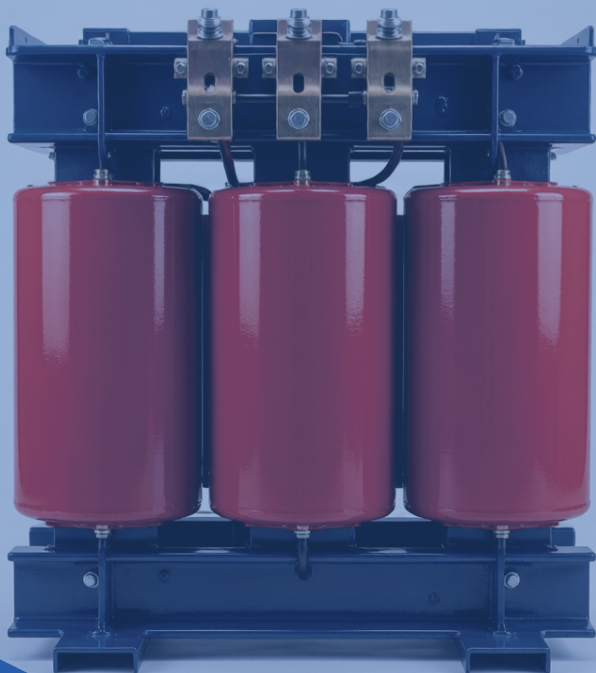




UL 1562 Dry-Type Transformer

Industrial Power Distribution



**BLACKHILL
POWER**

E-mail : bhp@blackhillpower.com
<http://www.blackhillpower.com>

Cast-Resin Dry-Type Transformer

The SCB-8000/34.5/690 and SCLB-8000/34.5/690 cast-resin dry-type copper / aluminum transformers are high-reliability power devices engineered for new energy and industrial power distribution. With a rated capacity of 8,000 kVA, primary voltage of 34.5 kV, secondary voltage of 690 V, and designed for 60 Hz systems, they are certified to UL 1562 and meet the stringent electrical safety and performance requirements of the North American market. Ideal for step-up / distribution applications in wind farms, photovoltaic plants, industrial facilities and more.

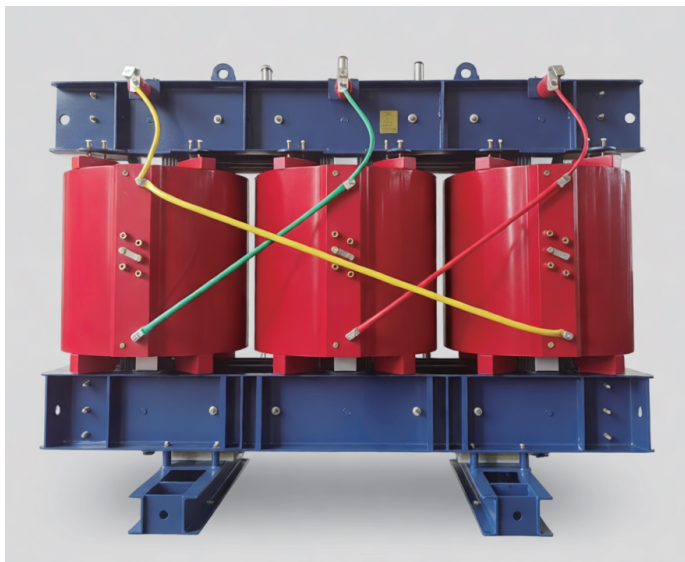
These transformers deliver efficiency up to 99.35%, effectively reducing operating losses and total cost of ownership. Both high-voltage and low-voltage windings use vacuum-cast epoxy resin construction for outstanding mechanical strength and long-term reliability.

Applications

- Wind & PV step-up substations
- Industrial plant distribution
- Commercial & public buildings
- Data centers

Key Features

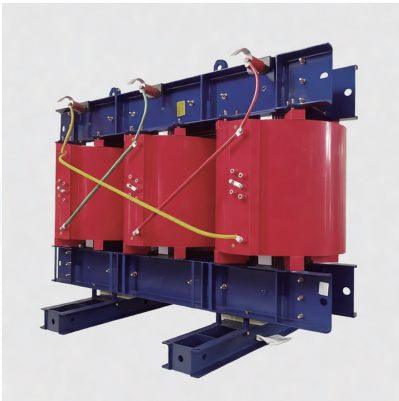
- UL 1562 certified for North American market access
- Efficiency up to 99.35%
- Vacuum-cast epoxy resin coils
- Partial discharge < 10 pC
- 200 kV lightning impulse withstand
- H-class insulation with optional temperature control
- AN / AF cooling options
- Maintenance-free, oil-free design



Transformer

General Description

- Insulation system: Cast-resin dry type, H-class insulation
- Rated power: 8,000 kVA
- Primary voltage: 34.5 kV
- Secondary voltage: 690 V
- Frequency: 60 Hz
- Vector group: Dyn11
- Short-circuit impedance: 9%
- Cooling: AN / AF (natural air / forced air)
- Efficiency: > 99.35%
- Enclosure: NEMA 3R (indoor & outdoor)
- Certification: UL 1562



Basic Parameters

Description	SCB-8000	SCLB-8000
Rated Capacity	8,000 kVA	8,000 kVA
Primary Rated Voltage	34.5 kV	34.5 kV
Primary Tap Range	$\pm 2 \times 2.5\%$	$\pm 2 \times 2.5\%$
Secondary Rated Voltage	690 V	690 V
Rated Frequency	60 Hz	60 Hz
Vector Group	Dyn11	Dyn11
Short-Circuit Impedance	9%	9%
Cooling Method	AN / AF	AN / AF
Insulation Class	H	H
Efficiency	> 99.35%	> 99.35%

Transformer

Insulation & Tests

Item	Value
Power-frequency Withstand	70 kV
Lightning Full-wave Impulse	200 kV
Partial Discharge	< 10 pC
Temperature Rise	< 115 K

Enclosure & Environment

Item	Value
Enclosure Protection	NEMA 3R
Altitude	< 1,000 m
Ambient Temperature	-25 °C ~ +40 °C

Overall Dimensions (Maximum Body)

Winding Material	Length (mm)	Width (mm)	Height (mm)
Copper	3,600	1,700	2,900
Aluminum	3,800	1,700	2,900