CEEG®

Deliver Premium Power to the World

Cast Resin Dry Type Transformers

Safe | Efficient | Low-Maintenance



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CEEG Overview

Tailored Solutions for Every Need

35+ industrial experience

2000+ employees

150+ countries with CEEG products

400,000+ transformers installed worldwide

Customize for You

CEEG offers flexible designs and extensive customization options.
We stay aligned with the world' s cutting-edge technologies and practices, ensuring our solutions keep pace with the future of the industry.
With a commitment to safety, energy efficiency, and environmental responsibility, we deliver reliable, sustainable, and cost-effective transformer solutions to customers worldwide.

Products

- Cast resin dry-type transformers
- Vacuum pressure impregnated (VPI) dry-type transformers
- Oil-filled transformers
- Prefabricated substations
- Dry-type and oil-filled rectifiers
- Marine transformers
- Variable frequency transformers
- Amorphous transformers
- Mobile transformers
- Harmonic mitigation transformers
- Explosion-proof mining transformers and substations
- ...

Transformers from 50 kVA up to 300 MVA, covering voltage levels up to 330 kV.

Qualifications

Certificates: UL, CE, CSA, and more.
Standards: IEC, ANSI/IEEE, EN, DIN, GB, and others.
Accredited Laboratories: CNAS, TÜV Rheinland, DEKRA.

Quality Management

CEEG is certified in accordance with:
- ISO 9001 (Quality Management)
- ISO 14001 (Environmental Management)
- ISO 45001 (Occupational Health & Safety)
- ISO 50001 (Energy Management)

CEEG Cast Resin Dry-Type Transformers

Overview

Since 1993, CEEG has been engaged in the research, development, and manufacturing of cast resin dry-type transformers, building decades of experience across diverse applications. Designed for environments that demand fire resistance, thermal stability, low noise, and moisture protection, these transformers perform reliably in commercial buildings, residential complexes, hospitals, and industrial facilities.

They also meet the stringent requirements of specialized installations, including outdoor sites, ship and offshore platforms, and petrochemical or corrosive environments. With proven endurance under fluctuating and heavy load conditions, CEEG cast resin transformers ensure consistent reliability and reduced maintenance costs throughout their service life. They are widely supplied to internationally recognized manufacturers.



CEEG Dry-Type Transformer Workshop



AFWF Marine Transformers for ABB



Transformers for an Italy's Photovoltaic Station

Available Voltage Ratings

1.1 kV
3.3 / 3.6 kV
4.16 kV
6.6 / 7.2 kV
11 kV
13.2 / 13.8 kV
15 kV class(14.4/15)
20 kV
22 / 24 kV
33 / 34.5/35 kV

Specialized Product Options

In addition to standard models, CEEG offers customized dry-type transformer solutions, including:

- Rectifier transformers (up to 4400 kVA)
- Amorphous alloy transformers
- Excitation rectifier transformers
- Dual-voltage transformers
- Double-split transformers
- No excitation voltage regulation transformers
- And other application-specific designs

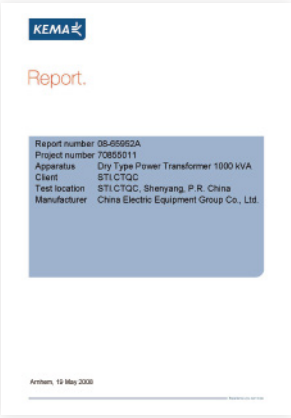
Applications

CEEG cast resin dry-type transformers serve a wide range of industries and operating conditions:

- Power distribution
- Marine and offshore applications
- Energy storage and renewable integration systems
- Indoor and outdoor units for primary and secondary substations
- Rail and transit traction power systems
- Variable-speed drive and reactor systems
- Operations with high, harmonic, or fluctuating load demand
- Chemical, petrochemical, mining, pulp and paper industries
- Nuclear

Scope of Supply

Parameter	Specification
Voltage Range	1.1 kV up to 35kV
Rated Capacity	Up to 25 MVA
Frequency	50 / 60 Hz
Impedance	4-8%
Cooling Methods	AN/AF/AFWF
Vector Groups	Dyn11 / Yyn0 / others on request
Core	Cold-rolled, grain-oriented silicon steel with step-lap joints
Insulation Temperature	155℃ , 180℃
Environment-Climate-Fire Class:	F1, E2, C2 (KEMA)
Working Temperature	-20℃~60℃
Enclosure Options	IP20,IP23,IP32,IP54, conforming to IEC 60529 with multiple materials available


KEMA

Report.

Report number 08-659652A
Project number 70855011
Apparatus Dry Type Power Transformer 1000 kVA
Client STI.CTQC
Test location STI.CTQC, Shenyang, P.R. China
Manufacturer China Electric Equipment Group Co., Ltd.

Arnhem, 19 May 2008


MATERIAL DATA

TEST OBJECT IDENTIFICATION



Standard Features

- Cast resin insulation for both primary and secondary windings
- Copper or aluminum conductor options
- Accessible tap connections for easy adjustment
- Flexible busbar and connection configurations
- Premium grain-oriented silicon steel cores
- Temperature rise options: 80°C and 115°C

Optional Features

- Custom paint finishes and corrosion-resistant coatings
- Forced-air or water cooling systems
- Anti-vibration mounting
- Electrostatic shielding and surge protection
- Integrated temperature monitoring and metering systems
- Amorphous alloy core
- IR viewing ports and control panel customization
- Ground fault relay and neutral grounding resistor protection
- Drive isolation and low inrush current design
- Enclosure options for marine, UV, or fungus-resistant environments
- RC snubber with monitoring circuitry



Transformer for Energy Storage System



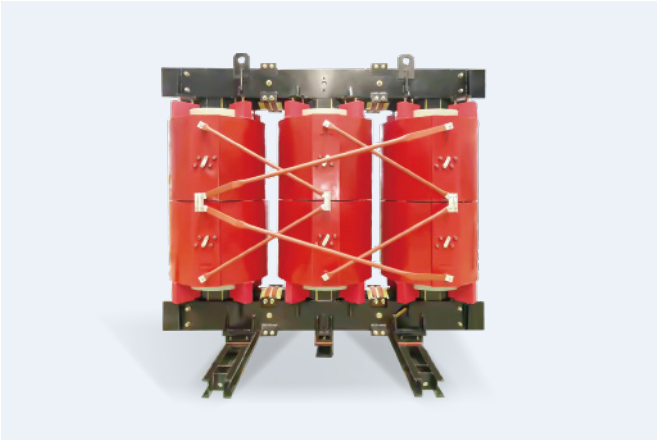
Rectifier Transformer



Amorphous Alloy Transformer



Traction Feeder Transformer



Double-Split Transformer

Product Excellence

Safety

1.The epoxy resin material used is flame-retardant, fire-resistant, crack-resistant, and performs reliably even under low temperatures.
2.The resin is supplied by Huntsman (USA) and is halogen-free, ensuring no release of toxic gases during operation and causing no harm to the environment, equipment, or personnel.

Reliability

1.Winding: coated with anti-mold and antibacterial varnish (8363).
Copper busbar: tin-plated with a 10 μm layer.
Iron components: coated with epoxy red oxide primer and amino baking enamel.
Clamping parts: cadmium-plated with a 15 μm layer.
2.Designed with strong seismic resistance, capable of withstanding earthquakes up to magnitude 8.
3.Excellent heat dissipation performance ensures long-term operational stability.

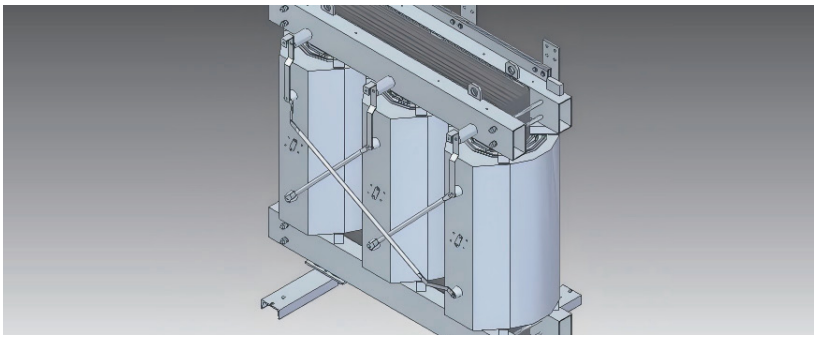
Stability

1.Moisture resistance: The transformer adopts a fully sealed vacuum casting and terminal sealing process, ensuring safe operation in environments with relative humidity above 96%.
2.Impact resistance: The special segmented cylindrical winding structure provides a partial discharge inception voltage of up to 8 kV/mm and a breakdown voltage of up to 190 kV/mm

Process Excellence

Product Design

With over 30 years of experience in transformer design, manufacturing, and testing, CEEG has developed advanced "3D + Parametric" design software. This system enables automated design, cost optimization, and simulation analysis. This provides a strong foundation for precise product design and consistent performance.







High-Voltage Windings

High-voltage windings are manufactured using premium conductors reinforced with chopped glass fiber mats. They are vacuum-cast with HEDRICH equipment, effectively minimizing partial discharge to ⩽5 pC and ensuring long-term reliability under demanding operating conditions.

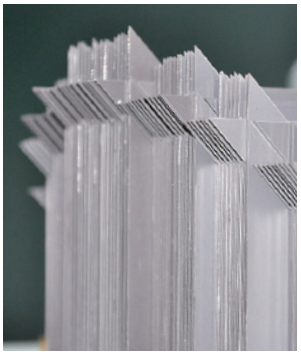
Low-Voltage Windings

Low-voltage windings utilize high-quality foil conductors wound on an automatic foil winding machine equipped with a hydraulic energy-saving foil tension and bending control system. Together with ±0.5 mm precision inspection and advanced argon arc welding, this ensures excellent coil alignment and reliability.









Core

The core is made from high-permeability, grain-oriented silicon steel sheets assembled with a 45° step-lap joint process. A specialized anti-moisture and anti-rust coating is applied to the surface, effectively reducing no-load loss, excitation current, and operational noise, while ensuring long service life.

Standard Features

Testing Facilities

CEEG operates four independent testing facilities, including a CNAS-accredited laboratory (China National Accreditation Service for Conformity Assessment), as well as TÜV Rheinland Witnessed and DEKRA Accredited Laboratories. These certifications ensure that all testing procedures meet stringent international quality and safety standards.

Every product undergoes comprehensive inspection and type testing before delivery—covering partial discharge, lightning impulse, noise, and other mandatory items—along with additional special tests when required. This rigorous process guarantees reliability, safety, and consistent quality.



















High Voltage Test Hall of CNAS Laboratory







Marine Transformers

CEEG is one of China's pioneers in water-cooled marine transformer technology and serves as a strategic supplier to leading global marine electrical equipment manufacturers.

Designed to withstand high salinity, humidity, mechanical stress, and vibration throughout the product lifecycle, our marine transformers provide stable and efficient performance in harsh offshore environments.

Key Features:

- Suitable for ships, drilling platforms, and other offshore applications
- Available in AN / AF / AFWF cooling designs
- Cast resin structure for voltages >1 kV; VPI structure for voltages <1 kV
- TW32-4 silicone paint coating for resistance to water, salt spray, mold, and dust
- Enclosure, body, and base rigidly integrated for superior vibration resistance
- High reliability minimizes maintenance costs in remote marine environments
- Certified by multiple classification societies, including CCS, ABS, BV, DNVGL, LR, KR, NK, and RINA





Data

Model: SC(B)14 100-2500/10
High Voltage (HV): 10 (10.5, 11, 6.6, 6.3, 6) kV
Connection Group: Dyn11 or Yyn0
Low Voltage (LV): 0.4 kV
HV Tapping Range: ±2×2.5%

Power (kVA)	Uk (%)	P_0 (W)	Pk (75°C) (W)	I_0 (%)	Lpa (dB(A))	Main Body Dimensions LxBxH(mm)	Top outlet enclosure dimensions (including base)	Side outlet enclosure dimensions (including base)
100	4	270	1240	0.7	42	1050×750×790	1700×1400×1600	1700×1400×2200
125	4	320	1450	0.7	42	1050×750×830	1700×1400×1600	1700×1400×2200
160	4	365	1670	0.7	42	1100×750×880	1700×1400×1600	1700×1400×2200
200	4	420	1990	0.7	43	1090×750×900	1700×1400×1600	1700×1400×2200
250	4	490	2170	0.7	43	1150×860×940	1700×1400×1600	1700×1400×2200
315	4	600	2730	0.7	45	1180×860×970	1700×1400×1600	1700×1400×2200
400	4	665	3140	0.7	45	1290×860×990	1700×1400×1600	1700×1400×2200
500	4	790	3830	0.6	46	1260×860×1030	1700×1400×1600	1700×1400×2200
630	4	910	4610	0.6	46	1300×860×1120	1900×1500×1800	1900×1500×2200
630	6	885	4690	0.6	46	1390×860×1060	1900×1500×1800	1900×1500×2200
800	6	1035	5470	0.4	49	1450×1020×1070	1900×1500×1800	1900×1500×2200
1000	6	1205	6430	0.4	50	1510×1020×1110	1900×1500×1800	1900×1500×2200
1250	6	1420	7610	0.4	51	1540×1020×1160	2000×1600×2200	2000×1600×2200
1600	6	1665	9230	0.3	51	1650×1150×1230	2000×1600×2200	2000×1600×2200
2000	6	2075	11420	0.3	52	1730×1150×1330	2200×1600×2200	2200×1600×2200
2500	6	2450	13540	0.3	53	1810×1150×1370	2200×1600×2200	2200×1600×2200
1600	8	1665	10160	0.3	51	1650×1150×1190	2000×1600×2200	2000×1600×2200
2000	8	2075	12530	0.3	52	1730×1150×1300	2200×1600×2200	2200×1600×2200
2500	8	2450	14830	0.3	53	1810×1150×1320	2200×1600×2200	2200×1600×2200

Note: The data is for reference only. Actual parameters may vary depending on specific project requirements.

SC(B) 18 100-2500 10kV
High Voltage (HV): 10 (10.5, 11, 6.6, 6.3, 6) kV
Connection Group: Dyn11 or Yyn0
Low Voltage (LV): 0.4 kV
HV Tapping Range: ±2×2.5%

Power (kVA)	Uk (%)	P_0 (W)	Pk (75°C) (W)	I_0 (%)	Lpa (dB(A))	Main Body Dimensions LxBxH(mm)	Top outlet enclosure dimensions (including base)	Side outlet enclosure dimensions (including base)
100	4	230	1240	0.7	42	1050×750×790	1700×1400×1600	1700×1400×2200
125	4	270	1450	0.7	42	1050×750×830	1700×1400×1600	1700×1400×2200
160	4	310	1670	0.7	42	1100×750×880	1700×1400×1600	1700×1400×2200
200	4	360	1990	0.7	43	1090×750×900	1700×1400×1600	1700×1400×2200
250	4	415	2170	0.7	43	1150×860×940	1700×1400×1600	1700×1400×2200
315	4	510	2730	0.7	45	1180×860×970	1700×1400×1600	1700×1400×2200
400	4	570	3140	0.7	45	290×860×990	1700×1400×1600	1700×1400×2200
500	4	670	3830	0.6	46	1260×860×1030	1700×1400×1600	1700×1400×2200
630	4	775	4610	0.6	46	1300×860×1120	1900×1500×1800	1900×1500×2200
630	6	750	4690	0.6	46	1390×860×1060	1900×1500×1800	1900×1500×2200
800	6	875	5470	0.4	49	1450×1020×1070	1900×1500×1800	1900×1500×2200
1000	6	1020	6430	0.4	50	1510×1020×1110	1900×1500×1800	1900×1500×2200
1250	6	1205	7610	0.4	51	1540×1020×1160	2000×1600×2000	2000×1600×2200
1600	6	1415	9230	0.3	51	1650×1150×1230	2000×1600×2000	2000×1600×2200
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1600	8	1415	10160	0.3	51	1650×1150×1190	2000×1600×2000	2000×1600×2200
2000	8	1760	12530	0.3	52	1730×1150×1300	2200×1600×2200	2200×1600×2200
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Note: The data is for reference only. Actual parameters may vary depending on specific project requirements.

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Get in Touch

Online, quick, and easy — scan the QR code to send your inquiry now.

If you're ready to discuss the details of your project, our team is ready to assist you. Simply complete the online form, and a CEEG representative will reach out to you shortly — it's the fastest way to get the information and quotation you need to move your project forward.

Contact us

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