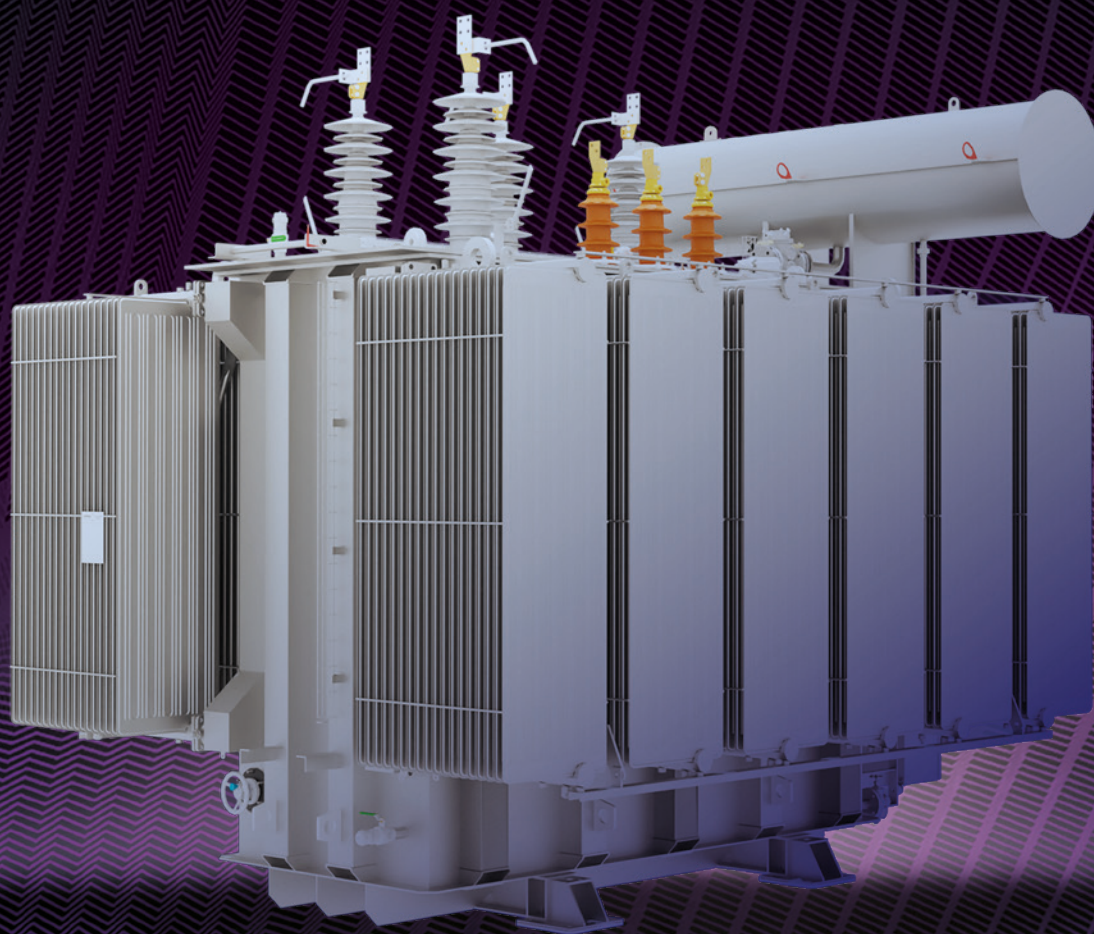


POWERING YOUR PROJECTS

Transformers for demanding applications



www.celduc-transfo.com

Made in France



EXPERTISE AT THE HEART OF DEMANDING APPLICATIONS

Designing transformers starts with a deep understanding of their operating environment.

At **celduc® transfo**, every project begins with a thorough analysis of electrical, industrial, and environmental constraints, which may include a preliminary on-site visit to fully assess real operating conditions. This approach, combined with our expertise, enables us to **anticipate constraints, optimize performance**, and **ensure the reliability** of our transformers.



Over 60 years of expertise delivering a wide range of technological solutions

- Oil-immersed transformers,
- Converter transformers (rectifier transformers, etc.),
- Step-down or step-up transformers,
- Homopolar generators, grounding transformers, neutral grounding reactors,
- Special transformers.

Insulating oil types

- "O" (mineral oil, inhibited or uninhibited),
- "K" (synthetic ester, natural ester, or silicone oil).

Cooling types

ONAN, ONAF, ODAF, OFAF, OFWF, ...

Tank types

- Smooth tanks,
- Corrugated fin tanks,
- Tanks with detachable radiators.



Transformers types

- **Hermetically** sealed,
- **Conservator type (breathing)**, with optional diaphragm.

Standards

- IEC 60076
- IEEE C57.12.00
- EN 60079 (ATEX)

European directives

- ATEX (2014/34/UE)
- Ecodesign (2009/125/CE)



Certifications & approvals

- IECEx
- UL/CSA (US Field Evaluation)
- Marine : DNV, BV, Lloyd's, RINA
- Integrated Management System (Quality, Occupational Health & Safety and Environment)





Products designed for a wide range of industries

Electricity production	Electricity grids	Electricity supply & distribution
 Offshore wind  Solar  Hydropower  Thermal (gas-fired)	 Interconnecting grids  Energy storage	 Railway traction  Industrial processes  Marine propulsion  Explosive areas

MORE THAN A MANUFACTURER: A TRUSTED PARTNER



Reliability and performance

Each transformer designed by **celduc® transfo** undergoes a comprehensive series of tests to ensure compliance, in particular with the international standard IEC 60076. All tests are performed **in-house** (except short-circuit tests, which are carried out in external laboratories).

- **Routine tests**, performed on every transformer manufactured.
- **Type tests**, carried out on the first unit of a series of identical transformers: lightning impulse, temperature rise, noise level.
- **Special tests**, winding capacitance measurement, Sweep Frequency Response Analysis (SFRA), short-circuit withstand test, partial discharge measurement, dissolved gas analysis (DGA), dissipation factor (tan delta), etc.



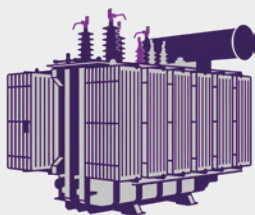
A strong industrial foundation

- **Since 1964**, recognized French industrial expertise,
- **A modernized, expanded, and well organized production facility**, ensuring full control over our manufacturing processes within our **4,500m² plant**,
- A robust local ecosystem enabling a **shorter, more reliable and controlled supply chain**, with **reduced environmental impact**.



SERVICES & SUPPORT

Beyond design and manufacturing, **celduc® transfo** offers a comprehensive range of **services to support the entire lifecycle of your transformers**: complete logistics management (loading, lashing, transport-adapted packaging (SEI4C), and organization of worldwide shipments), shock detection and recording devices for transport monitoring, as well as operational support including maintenance services, on-site interventions, spare parts supply, and technical documentation.



DESIGN

MANUFACTURING

TESTING



ON-SITE CUSTOMER
SUPPORT

Upon request, our team can support you through to the full commissioning of your transformer : Installation, assembly, connection, commissioning, on-site testing, start-up assistance, and staff training.



MAINTENANCE

We operate worldwide, including on offshore platforms, vessels, and industrial sites located in ATEX (explosive atmosphere) zones. Our teams hold the necessary certifications, electrical and chemical authorizations, and required training to work safely and effectively in these demanding environments.



SPARE PARTS

We are committed to supplying spare parts for your transformer for a period of 30 years. Our teams remain at your disposal to provide expert advice and support throughout the lifetime of your equipment.



MANUFACTURER
FILE

Supply of a complete manufacturer's documentation package, including 3D drawings, electrical diagrams of windings and auxiliaries, test reports, manuals (transport, storage, operation), Safety Data Sheets (SDS), as well as documentation and drawings of accessories.



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