

# Generation Step-Up Transformers

Prolec GE transformers, integral to a wide array of utility, commercial, and industrial applications, incorporate high-grade materials and cutting-edge technology for enduring reliability. With a global presence and over 300,000 MVA installed across 35 countries, Prolec GE possesses the engineering prowess to design, build, and optimize solutions for the electric industry. Addressing the initial stage of electricity supply, we manufacture transformers tailored for various generation types, including combined cycle, nuclear energy, hydropower, fossil, distributed generation, and renewable energy. Our commitment to meeting real-world needs is evident in our reliance on extensive customer input and feedback, ensuring ideal product performance, features, service levels, efficiency, support procedures, testing, and quality parameters.

## Standard features

Phases	1,000 MVA triphasic 500 MVA monophase
Rating	550 kV (1,675 kV BIL)
High voltage	LTC or DETC
Low voltage	LTC
Low noise level NEMA	25 dBA
Standards	ANSI, IEEE, CSA and IEC
Frequency	50 or 60 Hz
Oil	ASTM type I
CORE	External core ground bushing
HV tap changer	De-energized operation
Cooling Class	ONAN, ONAF, ODAF

\*Special accessories for offshore wind application



### **OPTIONAL FEATURES**

- Cooling fans.
- On load tap changer HV or LV, in tank or external.
- Multi-ratio current transformer.
- Automatic gas preservation systems.
- Rapid pressure rise relay:
- Under oil.
- In gas space.
- Lighting arresters.
- Transformer oil, ASTM type II.
- Side mounted bushings ≤34.5 kV.
- Conservator oil system.
- Buchholz relay for conservator.
- Forced oil cooling equipment.
- Provisions only for safety rails.
- Provisions for lighting arresters.
- Schnabel preparation.
- Vegetable oil.
- Extra low gas generation during factory tests (over75% lower than industry standards).

#### **TRANSFORMER TESTING**

Each transformer receives all standard commercial tests in accordance with ANSI, IEEE, CSA and IEC, with test reports available by serial number of the transformer:

- Polarity of windings & angular displacement.
- Ratio.
- No-load loss & exciting current.
- Load loss & impedance.
- Lighting impulse (class II).
- Low-frequency dielectric tests:
- Applied voltage tests on all windings.
- Insulation power factor (class II).
- Induced tests.
- Partial discharge in micro volts (class II).
- Partial discharge in pico coulombs (class II).
- Dissolved gas analysis (class I).
- Temperature rise.
- Zero phase sequence.
- Front of wave.
- Switching surge.



#### **OPTIONAL FEATURES**

You can trust Prolec GE with every aspect of your transformer solution for accountability and continuity advantages. Your project team coordinates and orchestrates your entire transformer package, including:

- Rigging and mobilizations.
- Transportation.
- Installation.
- Storage preparation.
- Field services.
- Maintenance.
- Training.
- Condition assessment.
- Spare parts.

For more information: info@prolec.energy

