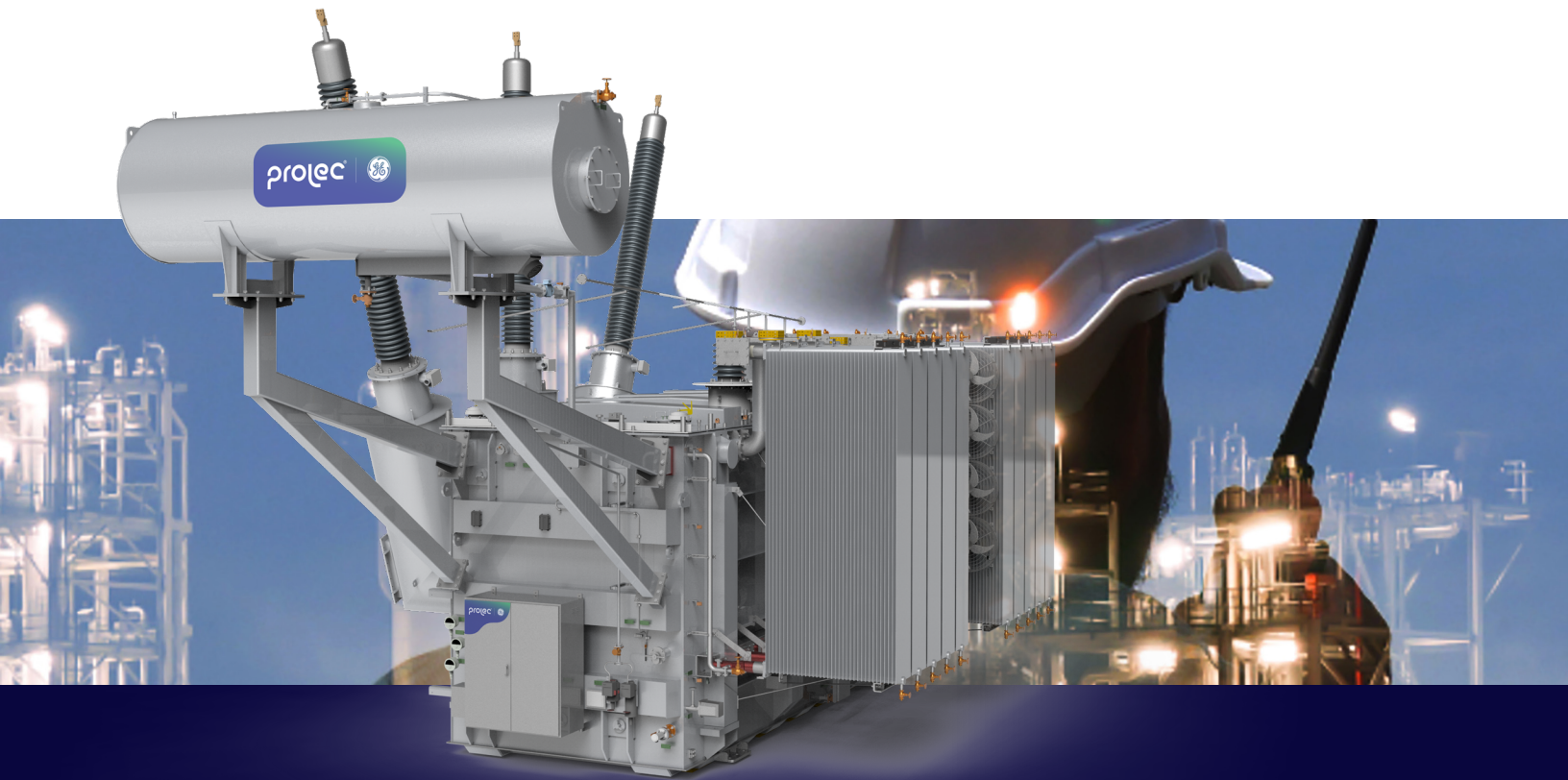


# Generation Power Transformers





Prolec GE transformers are used in a wide range of utilities, commercial and industrial applications. High-grade materials, combined with state-of-art technology in our design and manufacturing systems are key elements of a transformer that will deliver years of high reliability service.

With more than 300,000 MVA installed worldwide in more of 35 countries around the world; Prolec GE has the engineering and manufacturing expertise to design, build, optimize and deliver solutions to the electric industry.

Generation is the first step in the supply chain of electricity. At Prolec GE we manufacture transformers for different types of generation such as:

- Combined cycle
- Nuclear energy
- Hydropower
- Fossil
- Distributed generation

Prolec GE transformers are better-suited to your real- world needs because we rely on extensive customer input and feedback to determine the ideal product performance/features, service levels, efficiency, support procedures, testing and quality parameters.

We offer a complete line of liquid-filled Generator Step Up power transformers with:

- 1000 MVA 3 or 500 MVA 1
- 550 kV (1675 kV BIL)
- 50 or 60 Hz
- LTC in HV or LV or DETC in HV
- Low noise level NEMA – 25 dBA

# Standar features

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- Meets or exceeds current ANSI, IEEE, CSA and IEC standards
- Load tap changers
  - Reactive vacuum
  - Resistive
- Cooling classes
  - ONAN
  - ONAF
  - ODAF
- Cover mounted bushings
- Tank features
  - Lifting lugs
  - Pulling eyes
  - Radiator header valves
  - Jacking bosses
- Accessories
  - Pressures relief device
  - Magnetic liquid level gage
  - Winding temperature indicator
  - Pressure vacuum gage & bleed valve
  - Drain valves – global type
  - Nameplate
  - Removable radiator
  - Manholes in cover [2]
  - Transformer oil, ASTM type I
  - Sealed tank oil preservation systems
  - External core ground bushing
  - HV tap changer, de-energized operation

# Optional features & accessories

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- Low noise level NEMA – 25 dBA
- 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  $\leq 34.5$  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  
[over 75% lower than industry standards]



## Tests

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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
- Lightning 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

## Wind energy

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In Prolec GE we have a serious commitment with the environment, and reducing CO2 emissions is a priority to us. Wind energy is a very important source of power generation, able to achieve large reductions in power sector emissions and we are here to play a major role in this growing industry.

We have installed more than 150 wind farm Prolec GE's transformers in United States, Canada and Mexico, used to generate more than 17,000 MW of renewable energy.

## Technology development

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Research and development is a key element in our business model. Our Applied Technology Center boasts more than 80 engineers and specialists developing multi-generational product plans, design platforms, and continuous improvement processes. Their expertise and efforts make our customers' operations more reliable, efficient and environmentally friendly.

We also draw technology expertise and ideas from our partners, including GE and its worldwide technology resources, our suppliers, customers, consultants, and university centers.

## Complete range of turnkey services

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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 about Prolec GE India, go to: [www.prolecge.in](http://www.prolecge.in)



For more information contact your local GE Sales Representative  
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