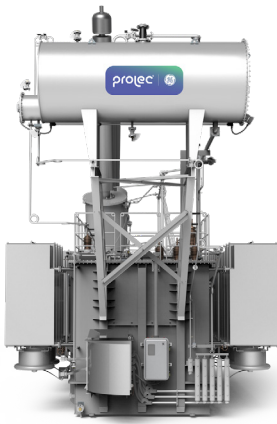


# Distribution Power Transformers





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.

A distribution system's network carries electricity from the transmission system and delivers it to end consumers. With our Primary Substation Transformers, manufactured under the most reliable quality standards, we help to deliver electrical energy in a timely and efficient way. 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 power transformers with:

- 1000 MVA  $3\phi$  or 500 MVA  $1\phi$
- 550 kV (1675 kV BIL)
- 50 or 60 Hz
- LTC in HV or LV, or DETC in HV
- Low noise level NEMA – 20 dBA

## Standard 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 – 20 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 lightning arresters
- Schnabel preparation
- Vegetable oil
- Extralowgasgenerationduringfactorytests (over75% 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



## Industrial PST

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Prolec GE's Industrial PST offers the best value for customers looking for substation transformers with the most reliable performance.

Prolec GE's improved Substation Power Transformers with voltages up to 138 kV are designed and manufactured with circular windings, especially for the REC/Muni, Commercial and Industrial markets.

Main benefits are to reduce weight and dimensions with an optimized core and coil design.

Product characteristics:

- Substation type (Delta – Wye connection)
- MVA from 5 to 40 MVA base
- High voltage from 69 kV to 138 kV
- Low voltage from 12 up to 34.5 kV
- With or without LTC
- With or without DETC
  - Also available in rectangular windings, rating from 5 - 12 MVA with high voltage up to 69 kV
- With or without conservator tank
- Frequency 60 Hz

## 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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