

# Pad-Mounted Transformers for Wind Applications

Prolec GE offers step-up transformers specifically designed for wind power generation applications. These transformers are optimized using duty cycle rating, and can be designed to be used outside the tower. Embracing sustainability, our transformers offer the option of using natural ester fluid (VG-100®) and amorphous metal core. Also, optional safety features include external accessories, in order to mitigate the risk of Arc Flash.

Standard features	
Rating	2-windings: up to 4,000 kVA, 3-windings: up to 3,400 kVA
High voltage	Up to 34,500 V Delta or Wye connected.
Tap changer	± 2, 2.5%
BIL	HV: Up to 200 kV LV: Up to 60 kV
Low voltage	Up to 1200 V Delta or Wye connected
Windings HV & LV	Aluminum
General standard IEEE	C57.12.34
Frequency	60 Hz
Bushings	HV: Well LV: Epoxy piece bushings with 4 holes blade
CORE	5-legged
Temperature rise:	65 °C
Cooling Class	ONAN
Impedance	5.75% ± 7.5%
Altitude	3,300 FASL



## OPTIONAL FEATURES

- High Voltage:
  - Copper windings.
  - Tap changer with 7 positions.
  - Radial feed.
  - Live front.
  - Bushing wells + inserts.
  - Integral bushing.
  - Porcelain bushing.
- Low voltage:
  - Copper windings.
  - Epoxy, 2 piece bushings, up to 12 holes blades.
  - Epoxy, 1 piece bushings up to 12 holes blade.
- Frequency: 50 Hz.
- Temperature rise: 55°C, 55/65°.
- Cooling class: KNAN.
- Insulating fluid: Natural ester fluid (VG-100®).
- Impedance per customer request, 7.5%.
- Altitude up to 14,850 FASL.
- Internal switch.
- Bay-O-Net expulsion fuses + current limiting fuses.
- Under-oil internal arresters.
- Stainless steel 409 tank & cabinet.
- Stainless steel 304 tank & cabinet.
- Infrared window.
- Powder paint system & liquid finish color per customer request.
- Duty cycle rating.
- Seismic designs IBC Certified.

## VALUE FEATURES

Concept	Description	Value point
Step-Up	Increased margin for transformer over excitation	Prevent core saturation, partial discharges, and gassing
Electronic Protection	Electrostatic shield	Provide a pathway to ground for any residual resonance
Network Protection	Electrostatic shield	Prevent capacitive coupling between the grid and capacitive banks of the inverter
Duty Cycle Rating	Load calculation based on specific location characteristics	Optimized size and cost



For more information:  
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