

prolec®



Step-Up Transformer for Windfarm Applications



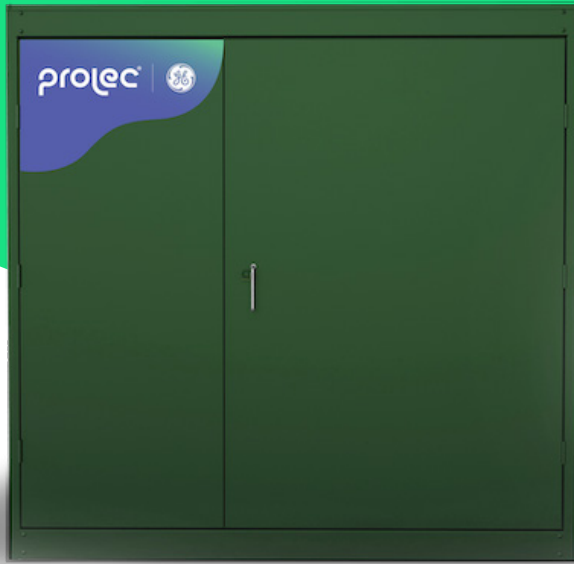
Prolec GE offers step-up transformers specifically designed for Wind Power Generation applications. These transformers are optimized using duty cycle rating, and can be designed to be used outside the tower. Embracing sustainability, our transformers offer the option of using natural ester fluid (VG-100®)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

Product scope/ Standard features

- Rating:
 - 2-windings: up to 4,000 kVA
 - 3-windings: up to 3,400 kVA
- High Voltage:
 - Aluminum windings.
 - Up to 34,500 V Delta or Wye connected.
 - BIL up to 200 kV.
 - Tap changer: $\pm 2, 2.5\%$.
 - Loop feed.
 - Dead front.
 - Bushing wells.
- Low Voltage:
 - Aluminum windings.
 - Up to 1200 V Delta or Wye connected.
 - BIL up to 60 kV.
 - Epoxy 2 piece bushings with 4 holes base.
- Frequency: 60 Hz.
- 5-legged core.
- Electrostatic shield.
- Temperature rise: 65°C.
- Cooling class: ONAN.
- Insulating fluid: Mineral oil.
- Impedance: 5.75% \pm 7.5%.
- Altitude: 3,300 FASL.
- Bay-O-Net expulsion fuses + partial-range current limiting fuses.
- Mild steel tank & cabinet.
- Powder paint system; Color: ANSI 70 or Green Munsell 7GY 3.29/1.5.
- Liquid paint system; Color: ANSI 70 or Green Munsell 7GY 3.29/1.5.
- Built to all applicable IEEE C57.12.34 (applies to designs outside of tower).
- Built to all applicable IEC 60076-14, IEEE PC57.154 TM/D5.

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



LOCATIONS

MEXICO

APODACA

Bldv. Carlos Salinas de Gortari km. 9.25
Apodaca, NL 66600
+52 (81) 8030-2000

USA

SHREVEPORT

7000 W Bert Kouns Industrial Loop
Shreveport, LA 71129
+1 (318) 687-6600

WAUKESHA

400 S Prairie Ave.
Waukesha, WI 53186
+1 (262) 547-0121

GOLDSBORO

2701 US Highway 117 South
Goldsboro, NC 27530
+1 (919) 734-8900

DALLAS

9011 Governors Row
Dallas, TX 75247
+1 (214) 637-4434

BRAZIL

CANOAS

Avenida Guilherme Schell, 11500
Canoas, RS 92.420-820
+55 (51) 3477-8700

For more information:
info@prolec.energy

prolec.energy

