

Premier Transformer provides a full range of single-phase pad-mounted distribution transformers engineered to meet ANSI, IEEE, NEMA, DOE, and RUS standards. Our designs incorporate the proven features highlighted by leading manufacturers and utility specifications, including dead-front, loop or radial feed configurations, high mechanical and corrosion resistance, and tamper-resistant construction suitable for modern residential, commercial, and utility applications. With ratings from 10 kVA up to 167 kVA and primary voltages up to 34.5 kV, Premier Transformer units are built for reliability, safety, and long service life. Standard features include stainless steel or painted mild-steel enclosures, automatic pressure relief, grounding provisions, bay-o-net and current-limiting fuse protection, and laser-engraved nameplates. Optional accessories such as dual voltage ratings, tap changers, arrester protection, and circuit breakers are available to match specific customer requirements. Every transformer is tested in accordance with the latest ANSI/IEEE procedures for losses, impedance, polarity, dielectric strength, and efficiency to ensure dependable field performance.

Single-Phase Pad-Mounted Transformers



Standard Features

Premier Transformer single-phase pad-mounted distribution transformers are engineered with robust construction and proven reliability for residential, commercial, and utility applications. Each unit incorporates the following standard features:

- Standards & Compliance
 - Meets or exceeds ANSI, IEEE, NEMA, DOE, RUS, and CSA requirements.
 - Designed and tested in accordance with ANSI C57.12.00, C57.12.21, C57.12.25, C57.12.28, and C57.12.90 for performance, safety, and enclosure integrity.
 - Manufactured under ISO 9001 certified quality systems.
- Tank & Enclosure
 - Dead-front, tamper-resistant construction suitable for loop or radial feed.
 - Crowned or domed tank cover to prevent water retention.
 - Mild steel or stainless-steel cabinet and tank with corrosion-resistant coating systems that exceed IEEE standards.
 - Recessed lifting provisions and removable sill for ease of handling and installation.
 - Flip-top or hinged doors with stainless steel hinge pins, captive penta-head/hex-head locking bolts, and padlock provisions for security.
 - Laser-engraved aluminum nameplate and NEMA/ANSI-compliant safety labels.

Standard Features (continued)

- Bushings & Connections
 - Externally clamped high-voltage bushing wells (200 A) suitable for loop or radial feed applications.
 - Externally clamped low-voltage threaded stud or spade-type bushings.
 - Parking stands for elbow connectors.
 - Tank ground pads and removable ground strap for reliable earthing.
- Safety & Protection
 - Automatic pressure relief device with provision for manual operation.
 - Two-fuse primary protection system (bay-o-net expulsion fuse in series with current-limiting fuse), with overload indication per utility standards.
 - Optional secondary circuit breaker or MagneX® interrupter protection.
 - Oil-retention and drip protection in fuse assemblies to minimize environmental risk.
- Fluid & Accessories
 - Filled with new, unused electrical grade mineral oil or Envirotemp™ FR3™ fluid (ester-based, fire-resistant, and environmentally friendly).
 - Oil fill/level top plug and bottom drain plug with sampling device.
 - Provision for temperature gauge, liquid level gauge, and pressure vacuum gauge as required.
 - Under-oil surge arrester and grounding connectors available.
- Performance & Testing
 - Continuous rating at 65 °C average winding rise, suitable for 50/60 Hz systems.
 - Designed for primary voltages up to 34.5 kV and secondary voltages 120–600 V.
 - Routine ANSI/IEEE tests performed on every unit: polarity, ratio, resistance, no-load and load losses, impedance, dielectric, induced/impulse, and leak test.
 - Guaranteed compliance with DOE energy efficiency requirements and NEMA TR-1 audible sound limits.

Optional Features & Accessories

To meet diverse customer and utility requirements, Premier Transformer offers a wide range of optional features and accessories:

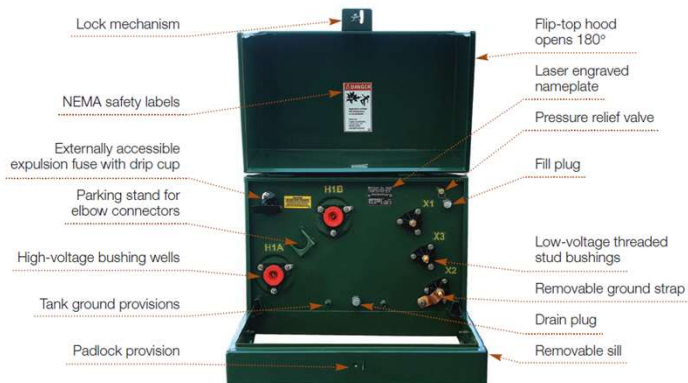
- Voltage & Tap Options
 - Dual high-voltage ratings (e.g., 13.8/6.9 kV or 24.9/14.4 kV).
 - High-voltage no-load tap changer with $\pm 2 \times 2.5\%$ or $\pm 5\%$ range.
 - Externally operable tap changer handle, lockable in any position.
- Tank & Enclosure Options
 - Complete stainless steel construction or hybrid stainless/mild steel designs.
 - Alternative finishes and customer-specified paint colors.
 - Special compact designs for space-constrained installations.
- Protection & Switching
 - High-voltage load-break switches (two-position or sectionalizing).
 - Multiple fuse arrangements:
 - Bay-O-Net expulsion fuse with isolation link.
 - Bay-O-Net plus partial range current-limiting fuse.
 - Weak link fuse combinations.
 - Secondary circuit breaker (thermal-magnetic type).
 - MagneX® interrupter or Vacuum Fault Interrupter (VFI) for resettable electronic protection.

Optional Features & Accessories (continued)

- Monitoring & Controls
 - Liquid level gauge, temperature gauge, and pressure/vacuum gauge.
 - Drain valve with sampling device.
 - Internal fault detection device with pressure relief indication.
 - Remote monitoring sensors (optional integration).
- Fluid & Environmental Options
 - Alternative insulating fluids: Envirotemp™ FR3™ natural ester, silicone, or other customer-specified dielectric fluids.
 - Spill containment trays and oil-absorbent materials beneath fuses.
- Terminations & Grounding
 - Customer-specified secondary spade sizes and terminal arrangements.
 - Additional grounding connectors and bus provisions.
 - Special bushing configurations and arrester terminations.
- Identification & Customer-Specific Customization
 - Stencils, decals, or engraved labels per customer requirements.
 - Utility logos and custom hazard markings.
 - Barcoded or RFID-enabled nameplates for asset tracking.

Product Summaries

- **Poly-Pad Option**
Premier transformers can be supplied pre-mounted on a polymer pad, which doubles as the shipping pallet and installation base. This reduces site preparation costs, eliminates separate pad procurement, and ensures quick, damage-free installation.
- **VFI (Vacuum Fault Interrupter) Transformer**
Combines voltage transformation and resettable fault protection in one unit. The VFI isolates downstream faults while keeping the transformer load energized, improving system reliability, minimizing outage areas, and simplifying fault location for utilities.
- **Shrubline Transformer (Type II)**
A low-profile, single-phase dead-front design that blends into residential landscapes. Ideal for subdivisions and underground residential distribution (URD), with ratings from 10–167 kVA and compact enclosure dimensions.
- **MaxiShrub Transformer (Type I)**
A full-size, single-phase dead-front design that allows straight (vertical) cable entry and supports heavier cabling. Suitable for residential or light industrial loads requiring higher flexibility in terminations.
- **Ranch Runner Transformer**
A compact, economical single-phase pad-mounted transformer rated 10–50 kVA. Approved for Rural Utilities Service (RUS), making it well-suited for rural distribution, irrigation, oilfield, and small commercial applications.



101 College Rd E,
Princeton, NJ 08540 USA

+1-640-250-3847

info@premier-transformer.com

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