

# 3-Phase Oil-Filled Power Transformers

# **10MVA to 250MVA**





All PDM oil-filled three-phase Power substation transformers have been designed, built and tested in accordance with industry standards to meet or exceed NEMA, ANSI C.57, DOE and IEEE as applicable. Featuring a wide range of customization, PDM's Power transformers can be designed to match your application requirements, minimize exposure to potential arc flash and other safety concerns, while providing reliable power delivery to utility systems, data centers, and industrial distribution.

All new PDM Power transformers are constructed of the highest quality materials and built to exacting engineering designs driven by Toshiba analysis software. Superior process equipment, elaborate material selection and efficient manufacturing produces transformers with smaller volume, lighter weight, low loss, low partial discharge, and low noise characteristics, for superior product quality. **Products can be UL**® **listed**.



## **Technical specifications: Three-Phase Oil-Filled Power Transformers**

# **Available Ratings**

Size (kVA)	From 10MVA up to 250MVA
Frequency	60 Hz or 50 Hz
Cooling Class	ONAN/ONAF/OFAF and KNAN/KNAF/KFAF (Type II Mineral Oil, FR3, or Silicone)
Temperature Rise	55°C, 65°C, 55/65°C
Impedance	5% up to 7.5%
Primary Voltage Class	35kV, 66kV, 110kV, 250kV, 350kV
Secondary Voltage	12kV, 25kV, 35kV, 66kV, 110kV

#### **Standard Features:**

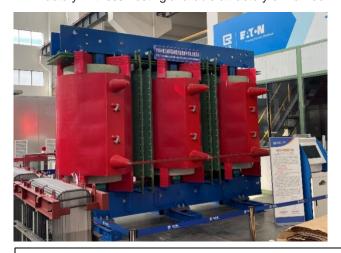
- 1. High-grade silicon-steel core
- 2. Windings: Aluminum or Copper
- 3. No-Load Tap Changer
- 4. Type II non-PCB mineral oil (ONAN)
- 5. Reinforced carbon steel tank
- 6. Removable radiators
- 7. Lifting lugs
- 8. Externally clamped high- and low-voltage bushings
- 9. Pressure relief valve
- 10. Pressure vacuum gauge
- 11. Liquid temperature gauge
- 12. Liquid level gauge
- 13. Drain and sample valve
- 14. Schrader valve
- 15. Ground pads/lugs
- 16. CT's matched to ratio requirements
- 17. Nitrogen blanket
- 18. 55/65°C, or 65°C temperature rise

### **Optional Features:**

- a. Environmentally safe FR3 oil (KNAN, flammable-point >300°C)
- b. On-Load Tap Changer
- c. Stainless steel tank
- d. Gauges with contacts
- e. Auxiliary NEMA 3R/4 control cabinet and terminal box
- f. Protection and Control device
- g. Winding temperature gauge
- h. Fan package (ONAF, OFAF, or KNAF, KFAF)
- i. Lid-mounted pressure relief device
- j. Rapid pressure relay, with/without seal-in relay
- k. Lightning arresters
- I. Electrostatic shielding
- m. K-rated design to reduce harmonics
- n. Buchholz relay
- o. Primary load-interrupter switch
- p. Neutral Ground Resistor

#### **Testing:**

- All standard commercial testing provided in accordance with ANSI and IEEE
- Test scripts may be customized to meet requirements
- Factory Witness Testing available at factory or via Zoom videoconferencing





Check out our complete line of Dry-type and Oil-filled Padmount transformers to support your load requirements.

Lead times are *three (3) months for new Power transformers production and testing for up to 150MVA*, depending on options and customizations selected. Lead times for up to 250MVA are 12 months due to components.

On site offloading, assembly and test supported through our partnership with Sunbelt Solomon. All products are covered by PDM's Limited Warranty of three (3) years. Extended warranties are available, contact us to learn more!