



Dry Type Transformers

utility | industrial | commercial

Individual solutions | from a global perspective.



VIRGINIA TRANSFORMER CORP

www.vatransformer.com



VTC, The Industry Leader

What you need. Where you need it. When you need it.

With Virginia Transformer Corp as your supplier for dry type transformers, you can expect more than an adequately designed product and standard customer service. Our customers know that VTC is the industry leader, and that means the best in technology, quality and service anywhere.

QUALITY CONSTRUCTION. QUICK TURNAROUND

We offer the widest range of products in North America. Our dry type transformers are available up to 10 MVA, 35 KV class. Construction and assembly of our units takes place in a state-of-the-art manufacturing facility conducive to dry type transformer construction. We built this facility in the mid-1990s to meet the growing demand for medium voltage products with quicker turnaround times. You can expect shipment of your dry type system in as little as 8 weeks. And we assemble our own medium voltage switches. This means VTC can ensure design compatibility, adherence to specifications, and ease of field installation of both the transformer and switch. Today, our 60,000-square-foot dry type transformer plant is ISO 9001 certified, like all of our operations. It is staffed by our world-class production team,

which is committed to rigorous process control and continuous improvement standards, including our zero-defect goal. Our dry type transformers up to 3,000 KVA and up to 15 KV class are UL listed. We test to ANSI, IEEE, and NEMA standards, and offer other testing if needed. The insulation system used is UL listed for 220° C medium voltage application. The varnish used is 100% solid (solvent less) for lower corona level.



MEETING EVERY CHALLENGE

VTC built its business around the challenge of special customer requirements. Customers count on us to design transformers that meet unusual application requirements and withstand harsh environmental conditions. We offer coil processing and enhanced protection to suit every industrial application.

Our engineers determine the best coil shape, winding type, and conductor material based on each customer's performance needs and parameters. VTC uses only cold-rolled, grain-oriented silicon steel in all of our cores. Depending on customer requirements, we can cut these laminations for step-lap mitered joints. Our design experts select a core

geometry for each system that will minimize losses. We wind coils in a temperature and humidity controlled, dust-free environment.

Our total commitment to custom design means customers can choose from a wide range of optional accessories. For temperature monitoring, VTC offers digital or analog gauges for one or three phases with multiple Normally Closed (NC) or Normally Open (NO) contacts. SCADA interface is also available. NC or NO over temperature thermostats are also available. Strip heaters can be installed for storage in humid conditions.

VTC's dry type transformers also have several options for cooling. Units can self-cool through ventilation in the enclosure, or we can install an automatic fan cooling package to handle overloads. Fans can also be added at a later date. Arresters and tamper resistant hardware is also available.

Customers can choose from a wide variety of termination arrangements. In addition to customized terminal locations to match every major switch gear transformer in the U.S., we also offer special flanged throats, air terminal chambers, and flexible connectors to external bus.

COIL OPTIONS

Coil shape

- Rectangular
- Circular

Coil winding

- Barrel
- Disc

Coil conductors

- Aluminum
- Copper

Applications

- Power
- Drive Isolation
- Exciter

Coil configurations

- Delta-Wye
- Zig-Zag
- Wye-Wye
- Delta-Delta
- Polygon

Coil sealing

- Polyester varnish VPI
- VPI and epoxy end caps
- Unidip

TENV TRANSFORMERS

For environments where the ambient air is subject to contamination, VTC offers a superior solution: Totally Enclosed, Non-Ventilated (TENV) transformers. Our TENV systems deliver all the benefits of conventional dry type systems – low



cost, ease of installation, and low maintenance. Because they're totally enclosed, TENV transformers also eliminate deterioration and the dielectric

problems caused from corrosive environments. Contaminants never come into contact with the 220° C rated core and coil assembly.

TENV transformers are an excellent choice for:

- Chemical plants
- Cement plants
- Environments with contaminants such as:
 - Gases, including chlorine and sulfur
 - Solids, such as coal dust, metal dust, and textile fibers
 - Fumes and vapors common to industrial plants
 - Salt-laden air

VTC offers TENV transformers up to 5,000 KVA and 35 KV class, for both indoor and outdoor applications.

TOTAL CUSTOMER CARE FROM START TO FINISH

VTC's customer commitment doesn't stop once the manufacturing process ends. We're just as focused on meeting our customers' needs during shipping, installation, and follow-up service. VTC offers total commissioning and testing services, from unloading and installation, to when your unit is in operation. Our maintenance and service staff is available 24 hours a day, 7 days a week with a simple phone call.

NO NEW TECHNOLOGY OUT THERE? THINK AGAIN.



In an industry as old as ours, many think there's not much that's truly new and improved. But at VTC, our engineers never give up their quest for improved technology and processes – anything to make our transformers even better. Recently the VTC team perfected a new technology. UNI tr ON is a uniquely designed power sensor that can detect the electric field produced by an energized transformer. With UNI tr ON, operators will know instantly when a transformer is on, even with no auxiliary power present. Now that really is new and improved.

UNI tr ON



Roanoke, VA



Chihuahua, Mexico



VIRGINIA TRANSFORMER CORP

220 Glade View Drive Roanoke, VA 24012 USA (540)345-9892 fax (540)342-7694 www.vatransformer.com

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