



ONE SOURCE-ONE COMMITMENT

VTC - GTC offers a total package to the Utility, Industrial, Oil and Gas and Renewable Energy markets for power generation and transmissions up to 1400 MVA 500 kV class

Virginia Transformer Corp

220 Glade View Drive, Roanoke, VA 24012

540.345.9892

540.342.7694

Virginia Transformer Corp (VTCW)

Complejo Industrial Chihuahua. Ave. Homero #3307, Chihuahua, MX

52.614.483.0000

52.614.481.4900

Virginia Transformer Corp (VTCU)

3770 Poleline Road, Pocatello, ID 83201

208.238.0720

208.238.1678

Georgia Transformer Corp (GTC)

2789 Highway 21 South, Rincon, GA 31326

912.754.5300

912.754.6882

VTC-I

Engineering Procurement Facility  
Delhi, India

Field Service – Installation | Maintenance | Spare Parts

(Available optionally after delivery)

1-800-882-3944

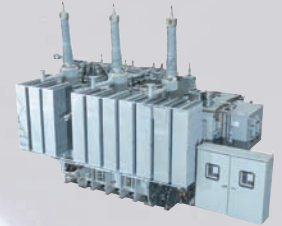
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www.vatransformer.com

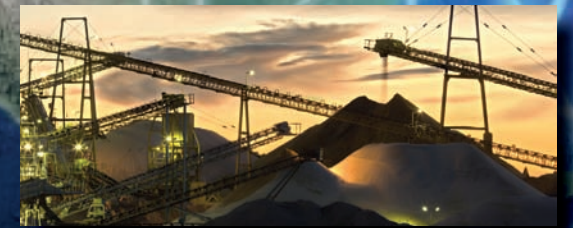
For a local representative, visit [www.vatransformer.com/Contact Us/Locate A Representative](http://www.vatransformer.com/Contact Us/Locate A Representative):  
to find the name and contact information

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The Distributor's  
and Contractor's  
Source for Power  
Transformers



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VIRGINIA TRANSFORMER and GEORGIA TRANSFORMER offers a total package to the Utility, Industrial, Oil and Gas, and Renewable Energy markets for power generation and transmissions up to 1400 MVA 500 kV class.

**Time:** VTC offers same day quotations and the best lead times in the industry to meet your customers' expectations.

**Responsive:** When your customers have questions you need answers. Because VTC is an engineering company building transformers our sales engineers will reply the same day.

**Advertising:** Building a Brand in the market place for a product is critical to support customers efforts. From social media to direct engineering presentations to end users we continue to find innovative ways to promote the VTC brand in every marketplace.

**New:** Our engineers find new technologies and manufacturing processes to offer the broadest product range making VTC-GTC the One-Stop-Shop for distribution and power transformers.

**Support:** Before, during and after the sale.

**Field Services:** Our field service team has years of experience to solve issues quickly.

**Open Transparency:** is critical between a customer and manufacturer. VTC keeps an open line of communication with you to ensure everyone is on the same page to complete an order to shipment.

**Reliable:** customers expect product lines to be reliable and perform. With four ISO 9001-2008 certified manufacturing plants following ANSI, CSA, IEC, ABS, NEMA standards, you can be assured we can meet any quality requirements customers may have.

**More:** You want more options to meet the demanding needs of your customers. VTC's product scope for Oil Filled Transformers is 300 kVA to 300 MVA up to 345 kV Class, and Dry Type Transformers from 300 kVA to 15 MVA up to 35 kV Class - 220° Class Insulation.

**Experience:** With over forty five (45) years of experience, distributors know they can rely on our technical expertise for the transformers we manufacture.

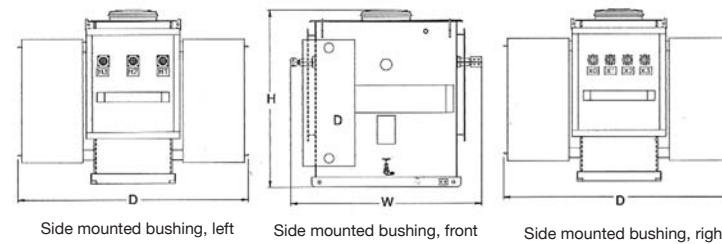
**Relationship:** Customers understand the value of relationships and knowing their customer's needs. VTC has outside representatives and a knowledgeable sales staff to support the relationships we have with you.

## STANDARDS

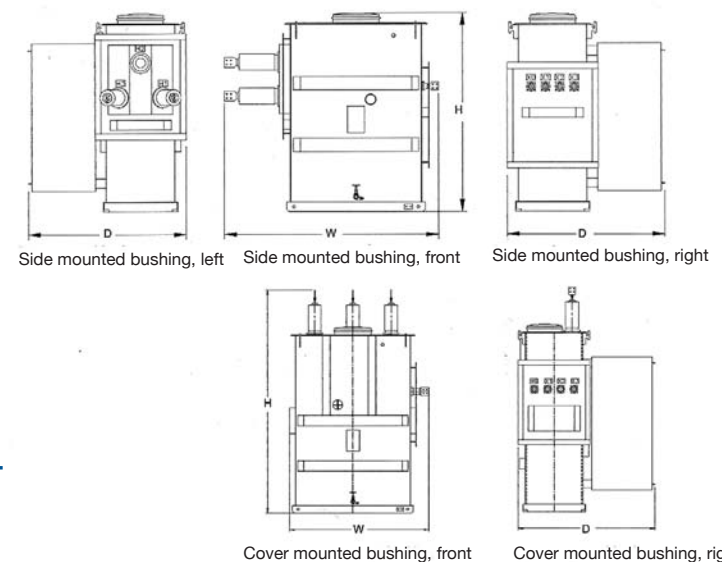
- ANSI – American National Standards Institute
- IEC – International Electrical Commission
- IEEE – Institute of Electrical and Electronic Engineers
- CSA – Canadian Standards Association
- C57.12.00 – Standard General Requirements for Liquid-Immersed Distribution, Power and Regulating Transformers
- C57.12.90 – Standard Test Code for Liquid-Immersed Distribution, Power and Regulating Transformers and Guide for Short Circuit Testing of Distribution and Power Transformers
- C57.93 – Guide for installation of Liquid-Immersed Power Transformers
- C57.98 – Guide for Transformer Impulse Tests
- C57.100 – Standard Test Procedure for Thermal Evaluation of Oil-Immersed Distribution Transformers



15 kV Class



35 kV Class



# Standard Transformer Data

Dimensions and weights are typical and should not be used for design purposes. For exact dimensions and weights, contact factory. Smaller or matching dimensions may be possible.

## TYPICAL DIMENSIONS

15 and 35 kV Classes, Two-winding				
KVA	H"	W"	D"	Wt. Lbs.
500	77	140	93	8,050
750	75	136	81	8,100
1000	80	143	95	10,800
1500	85	144	100	13,000
2000	98	161	100	18,000
2500	95	146	97	19,400
3000	85	149	142	19,800
3750	95	144	138	20,200

## DIELECTRIC INSULATION LEVELS FOR DISTRIBUTION TRANSFORMERS

Voltage (kV)	Basic lightning Impulse Insulation Level (BIL)	Low-Frequency Test Level (kV rms)
1.2 kV	30	10
2.5 kV	45	15
5 kV	60	19
8.7 kV	75	26
15 kV	95	34
25 kV	150	50
35 kV	200	70
46 kV	250	95

## COMPARISON OF PROPERTIES OF LESS-FLAMMABLE FLUIDS

		Mineral Type II	Luminol Bi Canada	Beta -51	FR-3
Dielectric	Dielectric Strength kV	30	44	40	45
	Dielectric Constant	2.2	2.2	2.1	3.2
	25 °C	>0.05	<0.0001	0.05	0.08
	100 °C	>0.30	0.0001	0.1	0.59
Physical	Specific Gravity 25° C	0.91	0.835	0.87	0.92
	Interfacial Tension 25° C (dynes/em) Neutralization	40	48	38	24
	Total Acid Number (mgKOH/gram)	0.4	<0.01	0.01	0.02
Viscosity	0 °C	76	48	195	190
	40 °C	12	9.0	108	34
	100 °C	3.0	2.4	12	88
Thermal	Flash Point ° C	145	>160	284	316
	Fire Point ° C	173		308	360
	Pour Point ° C	-40	<-40	-24	-21

Virginia Transformer also provides transformers for a range of specialty applications:

- Auto Transformers
  - Grounding Transformers
  - Motor Starting Transformers
  - Drive Isolation Transformer
  - Rectifier Duty Transformers
  - Dual Voltage Transformers
  - Reconnectable Transformers
  - Other Applications Available
- (18/24/36 Pulse Available)

Virginia Transformer provides the following gauges as specified:

- (LTG) Liquid Temperature Gauge
- (PVG) Pressure Vacuum Gauge & Bleeder
- (LLG) Liquid Level Gauge
- (PRD) Pressure Relief Device with Flange
- (SWTG) Simulated Winding Temperature Gauge
- (SPR) Sudden Pressure Relay
- (ONAF) Fan Cooling

Facility	MVA/Yr	Max MVA	Max kV	Max kV BIL	People / MBE	Other/Special	Full Scope Field Service
Rincon, GA Shell form	24,000	1,400 Shell	500 Shell	1,675 Shell	150/Yes	Autotransformer, HV or LV LTCs, Re-connectables, Shunt reactors, Phase shifters, High current furnace	Yes
Rincon, GA Core form		400 Core	345 Core	1,300 Core			
Pocatello, ID	10,000	100	230	1050	230/Yes	Re-connectable with various voltages, Tertiary windings, High current furnace rectifier, HV or LV LTCs, UL up to and including 100 MVA	Yes
Roanoke, VA Liquid filled	9,000	30	138	550	360/Yes	Re-connectable on HV or LV, UL up to and including 69kV, 3 phase Regulators, Neutral deriving (zig-zag grounding), Air core Reactor, Single Phase, Phase Changing, Auto-Transformer, HV or LV LTCs, 6, 12, 18 and 24 and 36 Pulse, including phase-shifted Drive Transformers	Yes
Roanoke, VA Dry-type		15	34.5	150			
Chihuahua, MX Liquid filled	4,000	10	69	350	350/Yes	Renewable padmount, ABS, RI-9 Circuit 25, 26, 31 rectifier transformers, Re-connectable Transformers	Yes
Chihuahua, MX Dry-type		7.5	34.5	150			
VT and GT assoc	47,000	1,400 Shell 400 Core	500 Shell 345 Core	1,675 Shell 1,300 Core	1,090	See above	Yes

5, 15, 25, 35kV class for 600A and 1200A PowerCon Switches also available from Roanoke and Chihuahua