



# Liquid Filled Transformers

VIRGINIA TRANSFORMER CORP

www.vatransformer.com

## TRANSFORMER FEATURES

**Range** – 2 to 100 MVA, 15KV to 230KV voltage class

**Loading** – Designed to deliver rated current and MVA in all tap positions

**Service** – Outdoor

**Basic Impulse Level (BIL)** – Per ANSI standard

**Impedance** – ANSI standard

**Coils** – Aluminum or copper conductor, circular construction, continuous or helical disc, or barrel wound

**Cooling Fluid** – Type II mineral oil, R-Temp or Silicone oil available up to 15 MVA

**Fluid Preservation System** – Sealed tank or conservator

**Cooling Radiators** – Plate type

**Gauges and Accessories** –

- Liquid temperature indicator
- Liquid level gauge
- Vacuum pressure gauge
- Drain valves
- Filter press connections (top and bottom)
- Automatic pressure relief device
- Control wiring in flexible conduit
- Other accessories available

**Paint** – ANSI 61 enamel on sandblasted surface, other colors available

**Nameplate** – Stainless steel, engraved

**Bushings** – Cover or side mounted

**Other** – Welded top cover, 19-in manhole covers, provisions on base for skidding, transformer lifting lugs, stainless steel ground pads

## OPTIONAL FEATURES

- Reconnectable windings
- Non-standard impedance
- Epoxy paint in your choice of color
- Demountable radiators with isolation valves
- Galvanized radiators
- Terminal throats and chambers
- Sloping roof
- Multi-stage fan cooling for increased MVA
- Other gauges and accessories
- Shock indicator
- Customer-specific controls and relays



## LIQUID FILLED BENEFITS

- High overload capacities
- Economical operation
- High level of dielectric reliability
- Low corona levels
- Sealed unit requiring low maintenance
- Versatility of terminating options using throats, flanges or air terminal chambers

## ADDITIONAL FEATURES AVAILABLE

- Rigid galvanized conduit wiring
- Provisions for parallel operation
- Potential transformer for voltage signal
- Loss evaluated designs



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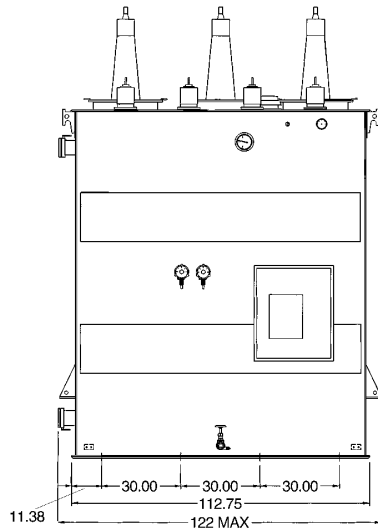
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## TYPICAL DIMENSIONS, WEIGHTS AND DATA FOR LIQUID FILLED TRANSFORMERS

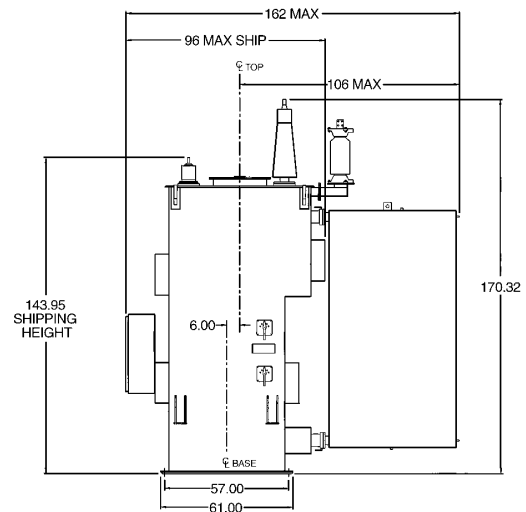
KV Voltage Class	KVA	Tank Height (inches)	Tank Width (inches)	Total Depth (inches)	Total Weight (pounds)	Oil Quantity (gallons)	NL	LL
15	2,500	94	78	98	15,000	400	5	29
15	3,750	120	90	110	20,000	510	7	42
15	5,000	120	110	110	28,000	850	9	46
15	10,000	140	120	110	44,000	1,500	14	81
15	15,000	140	140	168	60,000	2,000	20	115
69	5,000	164	108	115	45,000	2,000	12	47
69	10,000	173	115	123	60,000	2,400	18	86
69	15,000	173	127	128	73,000	2,700	22	115

Data is for estimating purposes only and should never be used for construction. Contact factory for actual dimensions, weights and oil volume.

## SAMPLE OUTLINE FOR 12-24 MVA LIQUID FILLED TRANSFORMER



FRONT VIEW



RIGHT SIDE

### LIQUID FILLED TRANSFORMER DATA

MOD/SN: 47012MA033	MVA: 12/13.4/16/17.9/20/22.4
PH: 3	60 Hz
	55/65°C Rise
Load Tap: ± 2 x 2.5%	Class: OA/OA/FFA/FFA/FFA/FFA
Impedance: 8.0% Nominal	Weight: 82,500 LBS
Windings: Copper	

Winding	Volts	BIL	AMPS. @ 22.4 MVA
HV	69000 x 34500 Delta	350 KV	375 NOM @ 34.5 KV
LV	12470 GRD Y/7200	110 KV	1037

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