

JUMBO “Step Down” Overhead Distribution Transformer

“JUMBO” Distribution Transformers are designed as single phase, two-winding transformers—specifically for “Step-Down” applications.



Standard Features

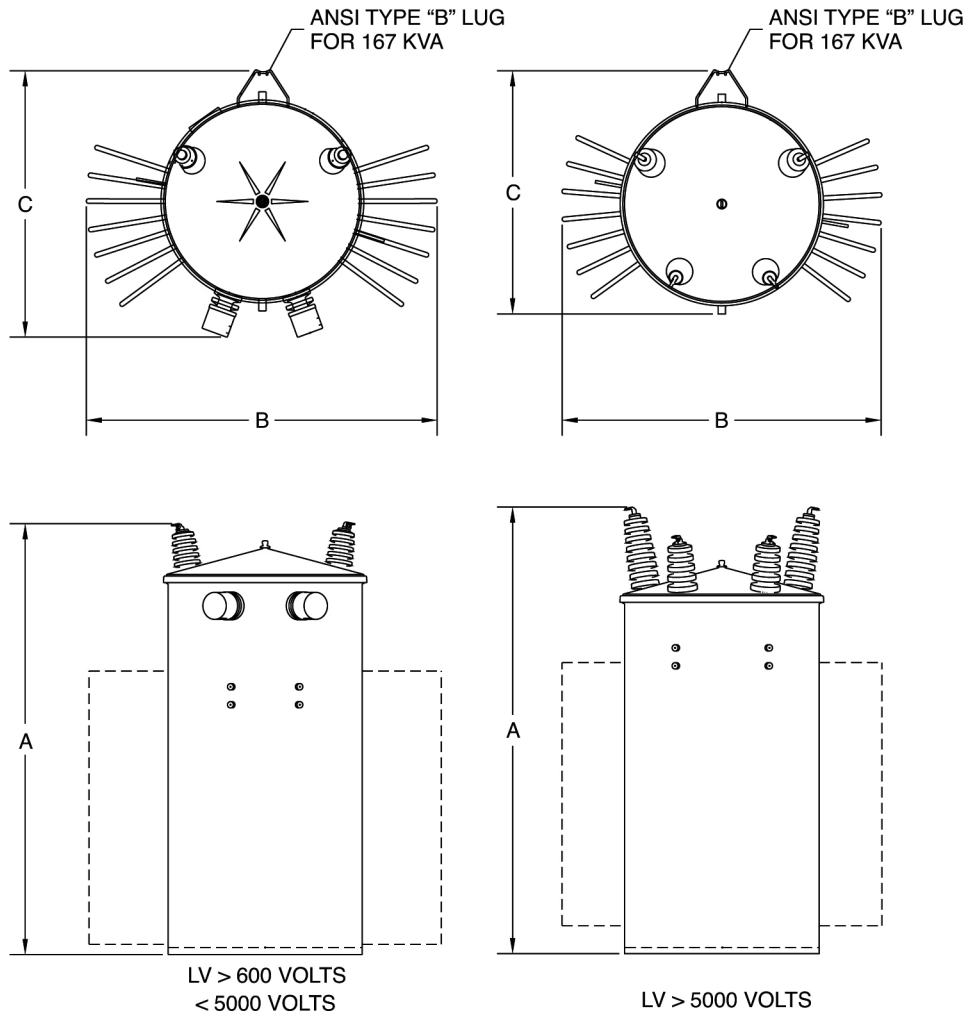
1. Lo-Hi-Lo coil design divides the short circuit force between low-high spaces increasing the short circuit strength of the coil.
2. Two winding construction yields a much higher impedance than is characteristic of an auto transformer which helps limit the mechanical forces the unit must sustain during fault duty.
3. Progressively wound coils with adhesive resins on thermally upgraded insulating paper provide increased short circuit and thermal strength.
4. Sheet conductor in LV windings enables the electrical centers in the high and low to align themselves minimizing the vertical component of short circuit forces.
5. Reinforced core-coil assembly provides greater short circuit withstand capability.
6. Prototype testing insures the Jumbo design can meet industry short circuit standards and provide reliable service.
7. Self-venting and resealing cover eliminates the need for an auxiliary pressure relief device and offers increased safety through higher tank withstand.
8. ANSI support lugs (hanger brackets) are rod-welded to the tank wall for added strength.
9. Anodized aluminum laser inscribed nameplate offers longer term readability.
10. Lifting lugs are positioned directly opposite the cover beam lugs, reducing the chance of the tank going out of round when lifted.
11. Cover mounted high voltage porcelain bushings with eyebolt terminals are mounted on flat embossments on the cover and have undercut gasket seats for improved sealing. The eyebolt connectors are cast bronze plated with tin.
12. Low voltage porcelain bushings with clamp-type terminals provide ease in making secondary terminations.
13. Arrester mounting pads are resistance welded to the tank wall, completely and uniformly filling the surfaces where pad and tank wall join, to provide greater strength.
14. The paint finish process applies a durable, corrosion resistant finish to the product. The finish meets or exceeds all the performance requirements of ANSI C57.12.28. The multi-step process includes an epoxy primer uniformly applied by cationic electrodeposition and a urethane top coat.
15. Tank bottom rim is three layers thick for increased durability and resistance to shipping and handling damage.

Ratings

- 50-500 kVA
- 65°C Rise
- 60 Hertz standard, 50 Hertz optional
- High voltages: 7200, 14400 and 19920
- Low voltages: 2400, 4800, 7200, 7620, 7970

Standard Design Dimensions and Weights

JUMBO LIQUID IMMERSED OVERHEAD DISTRIBUTION TRANSFORMER
 TYPE S, HV ABOVE 5 KV, > 100 KVA



All Approximate Dimensions shown reference designs with +/- 2.5% Taps

KVA	Jumbo									
	A			C			D	Wgt	Ship Wgt	OIL Qty
	7200 HV	14400 HV	B	7200 HV	14400 HV					
50	50	50	27	29	30	20	688	731	30	
75	50	54	27	32	32	20	861	911	39	
100	50	54	33	32	32	22	997	1082	46	
167	52	57	40	33	33	24	1419	1511	63	
250	55	59	44	38	37	24	1846	1935	78	
333	61	62	46	41	39	27	2309	2410	96	
500	70	71	46	44	47	27	3085	3180	121	

Overall weights and dimensions are given in pounds, inches or gallons and are approximates
 A = Overall Height, B = Overall Width, C = Overall Depth, D = Tank Diameter