

## JUMBO “Step Down” Overhead Distribution Transformer



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

### Standard Features

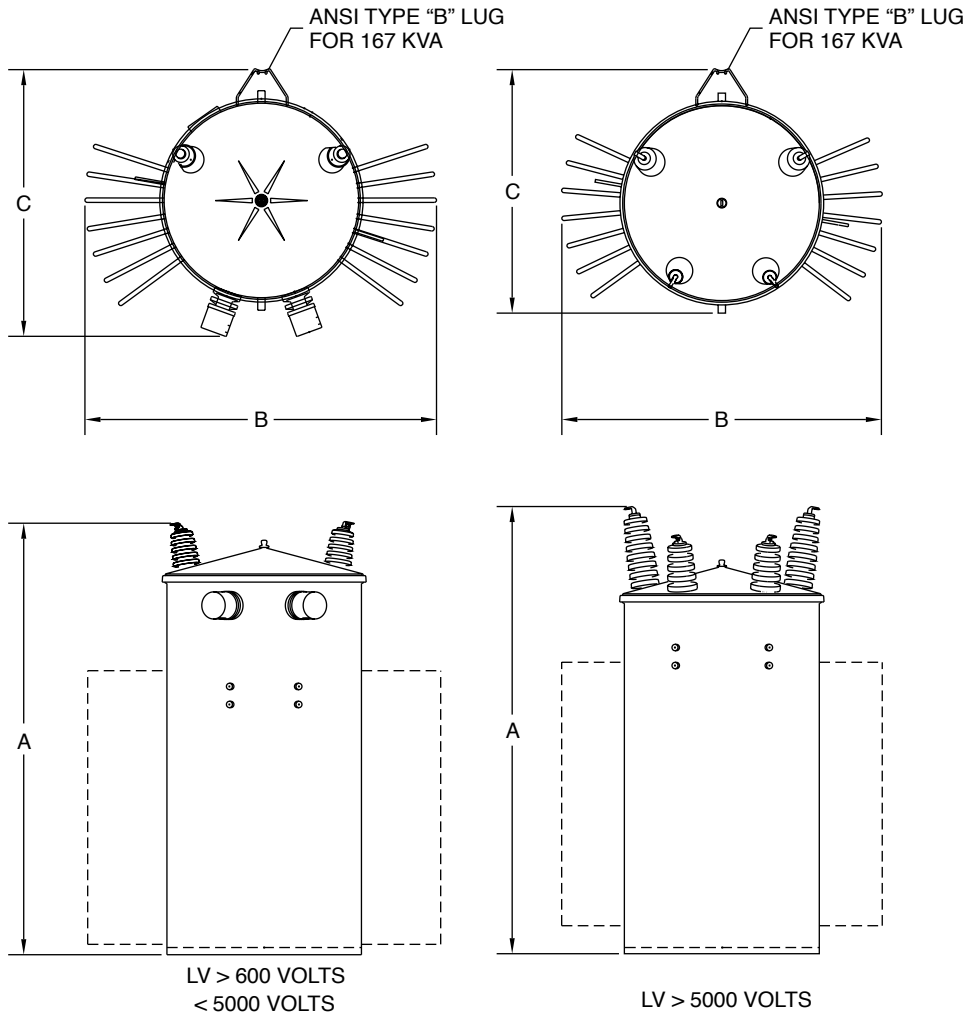
1. Lo-Hi-Lo coil design divides the short circuit force between two low-high spaces increasing the short circuit strength of the coil.
2. Two winding construction yields a much higher impedance than is characteristic of an auto transformer which helps limit the mechanical forces the unit must sustain 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 support 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 electro-deposition and a urethane top coat.

### Ratings

- 50-1000 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

**Jumbo**

KVA	A		B	C		D	Wgt	Ship Wgt	OIL Qty
	7200 HV	14400 HV		2400LV	7200LV				
50	45	47	24	28	25	20	750	785	36
75	Not Available								
100	45	52	31	31	31	22	1095	1150	50
167	58	52	33	37	33	27	2010	2090	88
250	54	56	41	37	33	27	2340	2440	85
333	54	64	45	37	33	27	2400	2500	88
500	69	68	45	39	36	27	3065	3165	120

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