

Single Phase Overhead Distribution Transformers

Power Partners single phase, oil-filled, pole-mounted distribution transformers are specifically designed for servicing residential overhead distribution loads. They are also suitable for light commercial loads, industrial lighting and diversified power applications. These transformers are designed for the application conditions normally encountered on electric utility power distribution systems.



Ratings

- 5-1000 kVA
- 65° C temperature rise
- 60 hertz standard, 50 hertz optional
- Low voltages: 120/240, 240/480 and 277 Volts
- High voltages: 2400 through 34,400 Volts
- Insulation levels:

Rated Voltage Ranges	Insulations Class	Basic Impulse Level (kV)
480-600	1.2	30
2160-2400	5.0	60
4160-4800	8.7	75
7200-12470	15.0	95
Optional 125kV BIL 12000 volts available		
13200-14400	18.0	125
19920-22900	25.0	150
Optional 125kV BIL 19200 volts available		
34500	34.5	200

Standard Features:

1. Lifting lugs.
2. Cover-mounted high voltage porcelain bushing(s) with eyebolt terminal (10-100 kVA) or spade terminal.
3. Low voltage insulators are available in fiberglass reinforced polyester material or porcelain (both eyebolt and spade terminals).
4. Low voltage neutral grounding strap (furnished on 10-50 kVA single HV bushing units).
5. ANSI support lugs (hanger brackets).
6. Cover has 13 mils minimum of polyester coating providing 15 kV dielectric insulation of tank ground parts from live parts and increased resistance to corrosion.
7. Self-venting and resealing cover assembly.
8. The core/coil bolt-in pads are 180° apart.
9. Embossed low voltage leads.
10. Oil filled plug with cover ground strap.
11. Tank ground pad.

12. Laser etched anodized aluminum nameplate with bar coded serial number.
 13. 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.
- The following additional features are all standard on self-protected type CSP® units:
14. Primary protective link.
 15. Surge arrester.
 16. Secondary circuit breaker.
 17. Secondary breaker operating handle with emergency overload reset and overload signal light.
 18. Tank bottom rim is three layers thick for increased durability and resistance to shipping and handling damage.



Options

Primary Termination

- Cover-mounted high voltage porcelain bushing(s) with spin top terminal.
- Side-wall mounted high voltage porcelain bushing(s) with spin top terminal (Standard on all 4800 volts and below).

Secondary Termination

- Low voltage porcelain bushings with NEMA spade terminals (Standard on all units 167 kVA and above).

Primary Switching

- Externally-operated tap changer.
- Externally-operated dual voltage switch or internal terminal board.

Overcurrent Protection

- Internally-mounted current limiting fuse in series with protective link.

Contact the division for voltages and dimensions on 667 through 1000 kVA.

Optional Accessories

1. High voltage bushings are of two types and are made of wet process porcelain:
 - Speed wrench operable eyebolt bushing for cover mounting.
 - Spin-top bushings for either cover or side-wall mount.
2. Tap changers compensate for small voltage variations along the distribution system. The externally operated tap changer is a single-phase, five-position design for de-energized operation.

3. A dual voltage switch permits use of the same transformer on distribution systems with different system voltages.
4. The CSP® protection package consists of four related components that work together to provide complete self-contained protection against surge currents, short circuits and overloads:
 - The protective link removes an internally-faulted transformer from the primary line, maintaining service to other customers on the line not served by the faulted unit.
 - The MOV polymer arresters handle surges of 65,000 amperes (small block) and 100,000 amperes (large block).
 - Secondary circuit breakers protect against overloads and external short circuits.
 - An optional current limiting fuse supplements the protective link when the fault current exceeds the link's rating.
5. Stainless steel tanks and covers are available.
6. EZ-Lift Eyebolt
7. Natural Ester Oils
8. IFD

Overhead Distribution Transformers

Approximate weights and dimensions

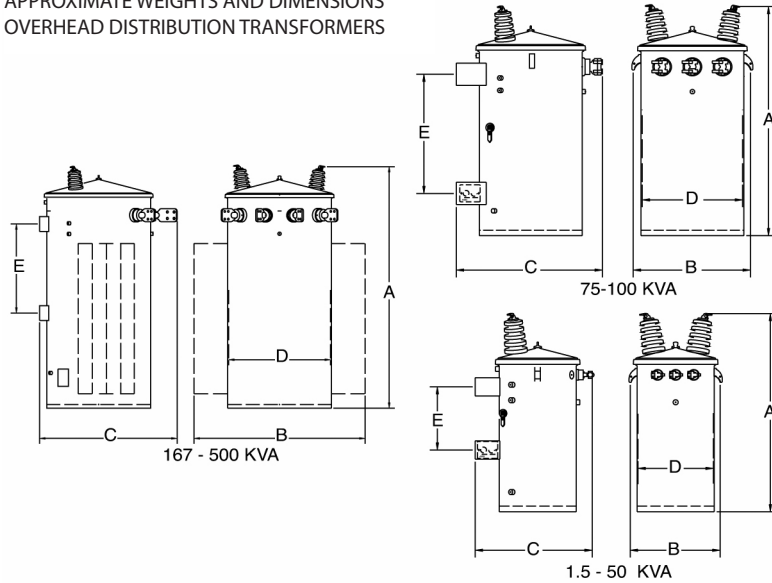
Standard Design Dimensions and Weights
(All weights and dimensions are approximate. Dimensions may change to meet the customer spec.)

Single Phase, 60 HZ, ONAN, 65° Rise High Voltage

(Refer to Division for available tap positions and dimensions for other primary voltages.)

Low Voltage 120/240 or 240/480 or 277 Standard Performance level

APPROXIMATE WEIGHTS AND DIMENSIONS OVERHEAD DISTRIBUTION TRANSFORMERS



Overall weights and dimensions are given in pounds
A = Overall Height, B = Overall Width, C = Overall Depth, D = Tank Diameter, E = Hanger Spacing

1 Phase								
Type 'S' - Class OA - 7200/12470Y Primary Voltage								
KVA	A	B	C	D	E	Wgt	Ship Wgt	OIL Qty
10	36	19	23	13.25	11.25	228	242	10
15	36	20	23	13.25	11.25	261	277	11
25	37	21	24	15.25	11.25	337	356	14
37.5	39	23	27	17.50	11.25	457	481	19
50	41	24	28	17.50	11.25	564	595	22
75	48	25	31	20	23.25	805	853	34
100	50	27	32	22	23.25	973	1032	39
167	54	36	37	24	23.25	1492	1573	58
250	56	40	40	27	23.25	2039	2132	73
333	58	43	42	27	23.25	2538	2640	82
500	66	46	43	27	35.25	3329	3432	101
Type 'S' - Class OA - 14400/24940Y Primary Voltage								
KVA	A	B	C	D	E	Wgt	Ship Wgt	OIL Qty
10	38	20	22	13.25	11.25	234	249	10
15	39	21	24	15.25	11.25	290	309	13
25	42	22	25	15.25	11.25	369	389	16
37.5	42	24	27	17.5	11.25	484	509	20
50	41	26	29	20	11.25	605	645	23
75	49	26	31	20	23.25	797	842	32
100	52	28	33	22	23.25	1014	1080	43
167	57	36	37	24	23.25	1555	1634	62
250	58	40	40	27	23.25	2023	2118	75
333	62	43	41	27	23.25	2379	2478	83
500	68	45	42	27	35.25	3240	3342	102

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