Three Phase Triplex Overhead Distribution Transformer

The Power Partners Triplex overhead distribution transformer can be used to serve three phase applications through 225 kVA. Triplex designs consist of three separate single-phase core-coil assemblies in one tank.



Triplex overhead distribution transformers are often used to serve large motor loads where the motors are frequently started. Oil field pumping loads and some irrigation pumping loads should use only triplex designs. Also, the Triplex transformer has international applications where Dy 5 and Dy 11 phase displacement are required.

Ratings

- 30-225 kVA
- 65°C rise
- 60 Hertz standard, 50 Hertz optional
- High Voltages: 13800 and below
- Low Voltages: 208Y/120, 240 x 480, and 480Y/277
- Transformer BIL Ratings

iansionnei bil natings				
Transformer Primary	Transformer BIL			
2400	60 kV			
4160	60 kV			
7200	75 kV			
8320	75 kV			
12000	95 kV			
12470	95 kV			
13200	95 kV			
13800	95 kV			

Advantages

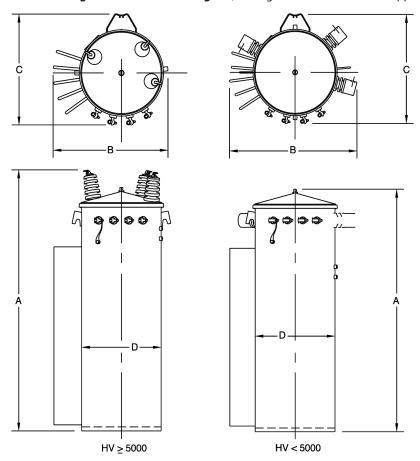
- Easier, cleaner installations are provided by three phase overhead transformers compared to three single-phase units.
- Reduced installation costs, lower operating costs, safer operation, minimized service disruptions, and increased transformer life provided by an optional CSP protection package. (Max. 150 kVA)
- The capability to serve large motor loads requiring frequent motor starting is provided by triplex designs.
- The same design, manufacturing and performance advantages that are provided on Power Partners single phase overhead distribution transformers are incorporated into the triplex design.

Features

- 1. Wound core with step-lap joints for increased efficiency and lower noise levels.
- Progressively wound coils with adhesive resins on insulating paper or conductors for increased shortcircuit strength, efficiency and thermal strength.
- CSP protection package available as an option for increased protection against surge currents, short circuits and overloads:
 - Primary protective links
 - Surge arresters
 - Secondary circuit breaker
 - Secondary breaker operating handle with emergency overload reset and overload signal light.
- 4. Three point core-coil bracing for increased mechanical strength.
- Self-venting and resealing cover that eliminates the need for an auxiliary pressure relief device and offers increased safety through higher tank withstand.
- 6. 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.
- 7. Cover has 13 mils minimum of polyester coating providing 15 kV dielectric insulation of tank ground parts from live parts and increasing resistance to corrosion. The cover is sloped 15 preventing water from collecting, thereby reducing the chances of corrosion and leaking.
- 8. Tank bottom rim is three layers thick for increased durability and resistance to shipping and handling damage.

POWER PARTNERS 12

Standard Design Dimensions and Weights (All weights and dimensions are approximate.)



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

High Volta	ges 4160GY	//2400, 720	0GY/4160	8320GY/48	20				
kVA	ges +100d1 А	72400, 720 В	C C	D D	E*	Wgt	Ship Wgt	OIL Qty	
30	57	25	26	17.5	23.25	836	875	41	
45	61	27	29	20	23.25	1110	1161	53	
75	64	25	32	20	23.35	1348	1393	58	
112.5	72	36	34	22	35.25	2028	2087	92	
150	74	32	33	22	35.25	2136	2209	75	
225	78	37	32	22	35.25	2350	2407	82	
High Voltages 12470GY/7200, 14400GY/8320									
kVA	Α	В	С	D	E*	Wgt	Ship Wgt	OIL Qty	
30	58	24	27	18.3	23.25	1066	1107	44	
45	65	24	29	20	23.25	1093	1135	47	
75	70	28	32	20	23.35	1405	1454	59	
112.5	76	33	35	22	35.25	2046	2115	83	
150	79	33	36	24	35.25	2157	2227	87	
225	79	42	36	24	35.25	2998	3085	95	
High Voltages 20780GY/12000, 21590GY/12470, 22860GY/13200, 23900GY/13800									
kVA	Α	В	С	D	E*	Wgt	Ship Wgt	OIL Qty	
30	58	24	27	17.5	23.25	840	950	36	
45	66	26	29	20	23.25	1160	1213	52	
75	68	29	32	20	23.35	1372	1425	59	
112.5	76	33	35	22	35.25	1832	1894	68	
150	79	33	36	24	35.25	2040	2111	75	
225	79	42	36	24	35.25	3024	3104	94	

^{*}E is the distance between the hanger brackets.

POWER PARTNERS 13