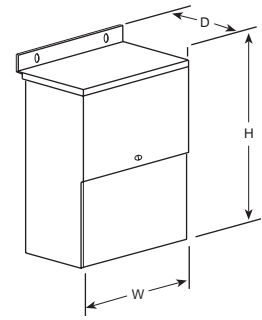


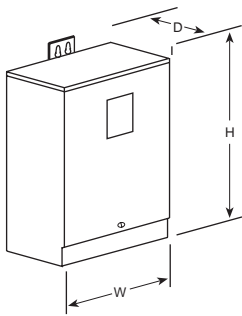
Dimensional Drawings

Sections I, II, III & IV

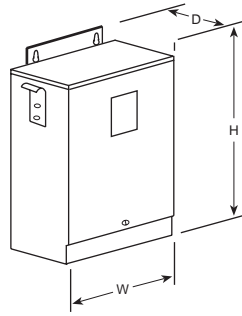
These drawings are for reference only.
Contact factory for certified drawings.



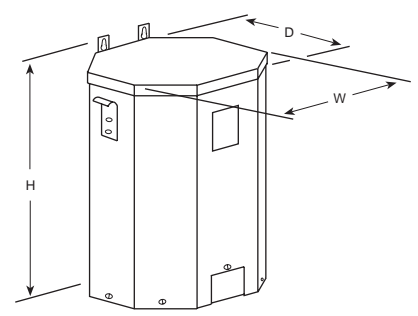
Design A



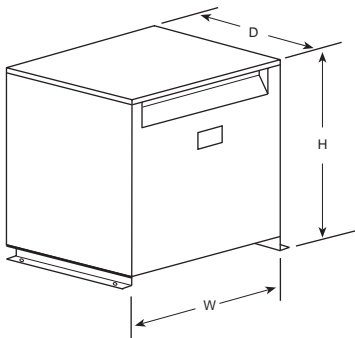
Design B



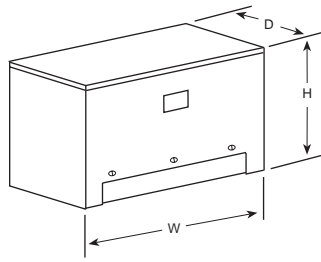
Design C



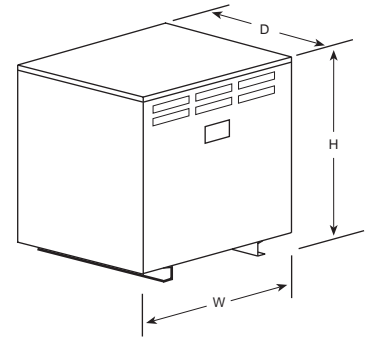
Design D



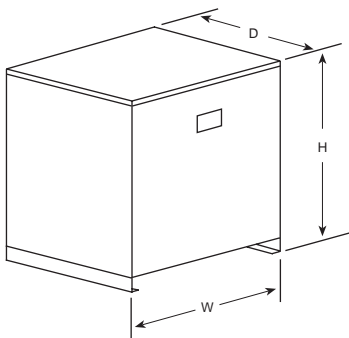
Design E



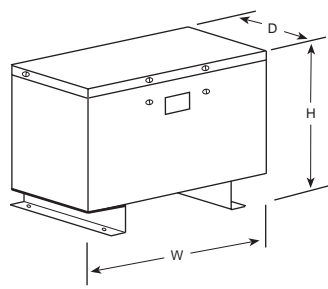
Design F



Design G



Design H

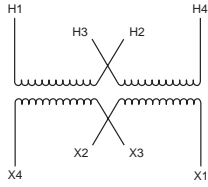


Design I

Electrical Connection Diagrams

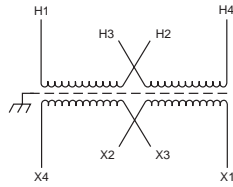
Sections I, II, III & IV

1 PRIMARY: 240 X 480
SECONDARY: 120/240
TAPS: None



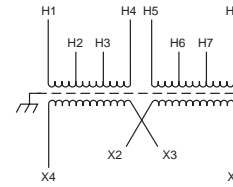
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
480	H1-H4	H2 to H3	
240	H1-H3 & H2-H4		
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

2 PRIMARY: 240 X 480
SECONDARY: 120/240
TAPS: None



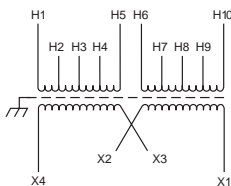
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
480	H1-H4	H2 to H3	
240	H1-H3 & H2-H4		
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

3 PRIMARY: 240 X 480
SECONDARY: 120/240
TAPS: 2, 2 1/2% ANFC, 2, 2 1/2% BNFC



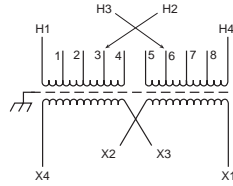
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
252	H1-H8	H1 to H5 H4 to H8	
240	H1-H7	H1 to H5 H3 to H7	
228	H1-H6	H1 to H5 H2 to H6	
504	H1-H8	H4 to H5	
492	H1-H8	H3 to H5	
480	H1-H7	H3 to H5	
468	H1-H7	H2 to H5	
456	H1-H6	H2 to H5	
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

4 PRIMARY: 240 X 480
SECONDARY: 120/240
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC



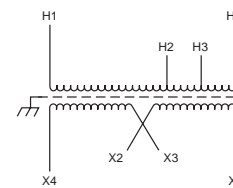
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
216	H1-H10	H1 to H9 H10 to H2	
228	H1-H10	H1 to H8 H10 to H3	
240	H1-H10	H1 to H7 H10 to H4	
252	H1-H10	H1 to H6 H10 to H5	
432	H1-H10	H2 to H9	
444	H1-H10	H3 to H9	
456	H1-H10	H3 to H8	
468	H1-H10	H4 to H8	
480	H1-H10	H4 to H7	
492	H1-H10	H5 to H7	
504	H1-H10	H5 to H6	
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X3-X4
120		X1 to X3 X2 to X4	X1-X4

5 PRIMARY: 240 X 480
SECONDARY: 120/240
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC



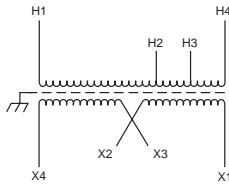
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
216	H1-H4	H1, H3, 8 & H2, H4, 1	
228	H1-H4	H1, H3, 7 & H2, H4, 2	
240	H1-H4	H1, H3, 6 & H2, H4, 3	
252	H1-H4	H1, H3, 5 & H2, H4, 4	
432	H1-H4	H2, 1 & H3, 8	
444	H1-H4	H2, 2 & H3, 8	
456	H1-H4	H2, 2 & H3, 7	
468	H1-H4	H2, 3 & H3, 7	
480	H1-H4	H2, 3 & H3, 6	
492	H1-H4	H2, 4 & H3, 6	
504	H1-H4	H2, 4 & H3, 5	
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

6 PRIMARY: 208
SECONDARY: 120/240
TAPS: 2, 5% BNFC



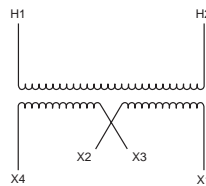
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
208	H1 & H4		
198	H1 & H3		
187	H1 & H2		
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

7 PRIMARY: 277
SECONDARY: 120/240
TAPS: 2, 5% BNFC



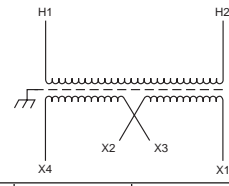
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
277	H1 & H4		
263	H1 & H3		
250	H1 & H2		
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

8 PRIMARY: 600
SECONDARY: 120/240
TAPS: None



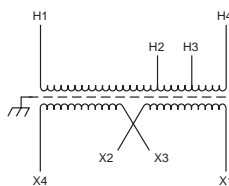
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
600	H1-H2		
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

9 PRIMARY: 600
SECONDARY: 120/240
TAPS: None



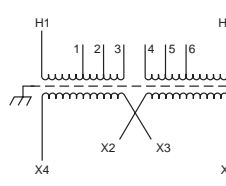
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
600	H1-H2		
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

10 PRIMARY: 600
SECONDARY: 120/240
TAPS: 2, 5% BNFC



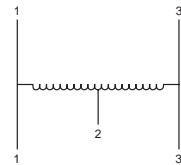
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
600	H1-H4		
570	H1-H3		
540	H1-H2		
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

11 PRIMARY: 600
SECONDARY: 120/240
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC



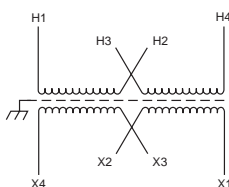
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
540	H1-H2	1-6	
555	H1-H2	1-5	
570	H1-H2	2-6	
585	H1-H2	2-5	
600	H1-H2	3-5	
615	H1-H2	2-4	
635	H1-H2	3-4	
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

12 PRIMARY: 240
SECONDARY: 120/240
TAPS: None



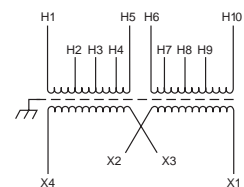
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
240	1-3		
Secondary Volts			
240			1-3
120			1-2 or 2-3
120/240			1-2-3

13 PRIMARY: 120 x 240
SECONDARY: 120/240
TAPS: None



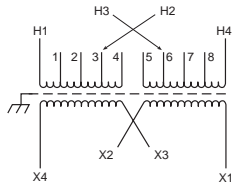
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
240	H1-H4	H2 to H3	
120	H1-H3 & H2-H4		
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

14 EXPORT MODEL
PRIMARY: 190-220 x 380-440
SECONDARY: 120/240



Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
190	H1 & H7	H1 to H6 H2 to H7	
200	H1 & H8	H1 to H6 H3 to H8	
208	H1 & H9	H1 to H6 H4 to H9	
220	H1 & H10	H1 to H6 H5 to H10	
380	H1 & H7	H2 & H6	
400	H1 & H8	H3 & H6	
416	H1 & H9	H4 & H6	
440	H1 & H10	H5 & H6	
Secondary Volts			
240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

15 EXPORT MODEL
PRIMARY: 190-220 x 380-440
SECONDARY: 120/240

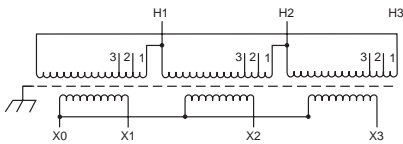


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
190	H1 & H4	H1, H3, 8 & H2, H4, 1	
200	H1 & H4	H1, H3, 7 & H2, H4, 2	
208	H1 & H4	H1, H3, 6 & H2, H4, 3	
220	H1 & H4	H1, H3, 5 & H2, H4, 4	
380	H1 & H4	H2, H3, 1, 8	
400	H1 & H4	H2, H3, 2, 7	
416	H1 & H4	H2, H3, 3, 6	
440	H1 & H4	H2, H3, 4, 5	

Secondary Volts

240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

18 PRIMARY: 240 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 5% BNFC

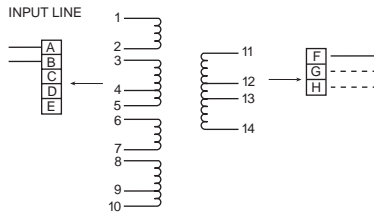


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
240	H1, H2, H3	1	
228	H1, H2, H3	2	
216	H1, H2, H3	3	

Secondary Volts

208			X1, X2, X3
120 1 phase			X1 to X0 X2 to X0 X3 to X0

16 POWER LINE CONDITIONER

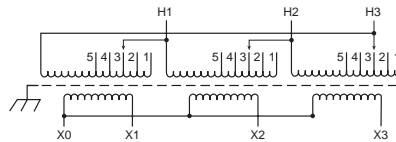


Input Connections		Insulate & Isolate
Volts	Connect	
120	1, 3, 6, 8 to A 2, 5, 7, 10 to B	4, 9
208	1, 6 to A 4, 9 to B 2, 3 to C 7, 8 to D	5, 10
240	1, 6 to A 5, 10 to B 2, 3 to C 7, 8 to D	4, 9
480	1 to A 10 to B 2, 3 to C 5, 6 to D 7, 8 to E	4, 9

Output Connections		Output Lines To
Volts	Connect	
120	11 to F 12 to G 14 to H	F, G
120/240	11 to F 12 to G 14 to H	F, G, H
208	11 to F 12 to G 13 to H	F, H
240	11 to F 12 to G 14 to H	F, H

NOTE: To prevent externally shorting, all leads marked "INSULATE" must be individually capped with wire nuts or equivalent. Insulate leads individually!

19 PRIMARY: 240 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 2 1/2% ANFC, 2, 2 1/2% BNFC

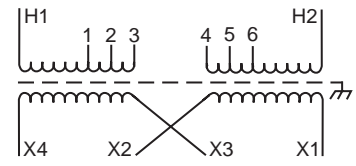


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
252	H1, H2, H3	1	
246	H1, H2, H3	2	
240	H1, H2, H3	3	
234	H1, H2, H3	4	
228	H1, H2, H3	5	

Secondary Volts

208			X1, X2, X3
120 1 phase			X1 to X0 X2 to X0 X3 to X0

17 PRIMARY: 208 Volts
SECONDARY: 120/240 Volts
TAPS:

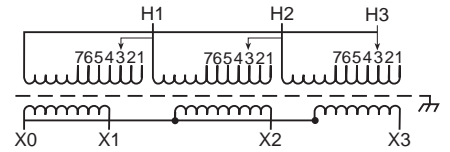


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
218	H1 & H2	3 to 4	
213	H1 & H2	2 to 4	
208	H1 & H2	3 to 5	
203	H1 & H2	2 to 5	
198	H1 & H2	1 to 5	
192	H1 & H2	2 to 6	
187	H1 & H2	1 to 6	

Secondary Volts

240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

20 PRIMARY: 380 Volts Delta
SECONDARY: 220Y/127 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC

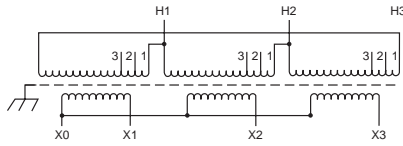


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
399	H1, H2, H3	1	
390	H1, H2, H3	2	
380	H1, H2, H3	3	
371	H1, H2, H3	4	
361	H1, H2, H3	5	
352	H1, H2, H3	6	
342	H1, H2, H3	7	

Secondary Volts

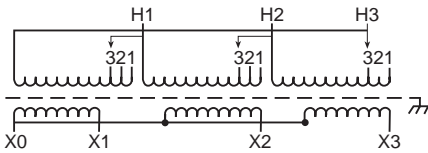
220			X1, X2, X3
127 1 phase			X1 to X0 X2 to X0 X3 to X0

21 PRIMARY: 480 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 5% BNFC



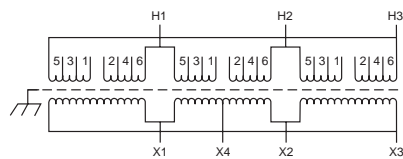
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
480	H1, H2, H3	1	
456	H1, H2, H3	2	
432	H1, H2, H3	3	
Secondary Volts			
208			X1, X2, X3
120 1 phase			X1 to X0 X2 to X0 X3 to X0

24 PRIMARY: 380 Volts Delta
SECONDARY: 220Y/127 Volts
TAPS: 2, 5% BNFC



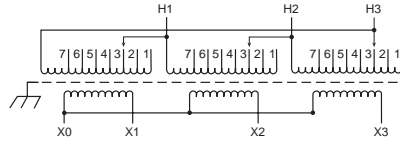
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
380	H1, H2, H3	1	
361	H1, H2, H3	2	
342	H1, H2, H3	3	
Secondary Volts			
220			X1, X2, X3
127 1 phase			X1 to X0 X2 to X0 X3 to X0

27 PRIMARY: 480 Volts Delta
SECONDARY: 240 Volts Delta/120 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC



Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
504	H1, H2, H3	1 to 2	
492	H1, H2, H3	2 to 3	
480	H1, H2, H3	1 to 4	
468	H1, H2, H3	3 to 4	
456	H1, H2, H3	1 to 6	
444	H1, H2, H3	3 to 6	
432	H1, H2, H3	5 to 6	
Secondary Volts			
240			X1, X2, X3
120			X1, X4 or X2, X4

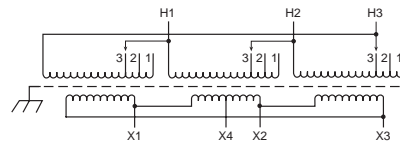
22 PRIMARY: 480 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC



Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
504	H1, H2, H3	1	
492	H1, H2, H3	2	
480	H1, H2, H3	3	
468	H1, H2, H3	4	
456	H1, H2, H3	5	
444	H1, H2, H3	6	
432	H1, H2, H3	7	
Secondary Volts			
208			X1, X2, X3
120 1 phase			X1 to X0 X2 to X0 X3 to X0

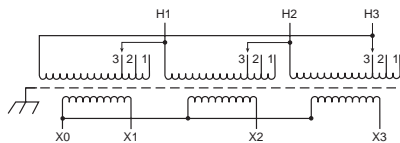
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
208			X1, X2, X3
120 1 phase			X1 to X0 X2 to X0 X3 to X0

25 PRIMARY: 480 Volts Delta
SECONDARY: 240 Volts Delta/120 Volts
TAPS: 2, 5% BNFC



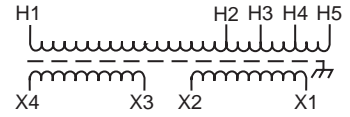
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
480	H1, H2, H3	1	
456	H1, H2, H3	2	
432	H1, H2, H3	3	
Secondary Volts			
240			X1, X2, X3
120			X1, X4 or X2, X4

28 PRIMARY: 600 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 5% BNFC



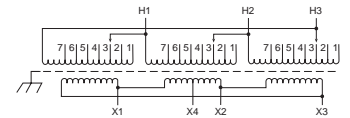
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
600	H1, H2, H3	1	
570	H1, H2, H3	2	
540	H1, H2, H3	3	
Secondary Volts			
208			X1, X2, X3
120 1 phase			X1 to X0 X2 to X0 X3 to X0

23 PRIMARY: 120/208/240/277 Volts
SECONDARY: 120/240 Volts



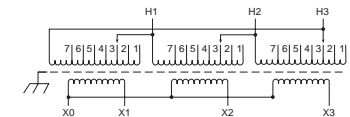
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
277	H1, H5		
240	H1, H4		
208	H1, H3		
120	H1, H2		
Secondary Volts			
120		X1 to X3 X2 to X4	X1-X4
120/240		X2 to X3	X1-X2-X4
240		X2 to X3	X1-X4

26 PRIMARY: 480 Volts Delta
SECONDARY: 240 Volts Delta/120 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC



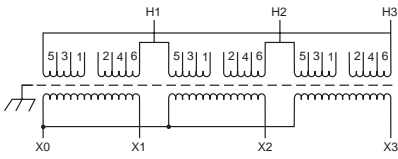
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
504	H1, H2, H3	1	
492	H1, H2, H3	2	
480	H1, H2, H3	3	
468	H1, H2, H3	4	
456	H1, H2, H3	5	
444	H1, H2, H3	6	
432	H1, H2, H3	7	
Secondary Volts			
240			X1, X2, X3
120			X1, X4 or X2, X4

29 PRIMARY: 600 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC



Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
630	H1, H2, H3	1	
615	H1, H2, H3	2	
600	H1, H2, H3	3	
585	H1, H2, H3	4	
570	H1, H2, H3	5	
555	H1, H2, H3	6	
540	H1, H2, H3	7	
Secondary Volts			
208			X1, X2, X3
120 1 phase			X1 to X0 X2 to X0 X3 to X0

30 PRIMARY: 600 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 2¹/₂% ANFC, 4, 2¹/₂% BNFC

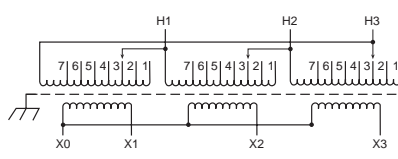


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
630	H1, H2, H3	1 to 2	
615	H1, H2, H3	2 to 3	
600	H1, H2, H3	1 to 4	
585	H1, H2, H3	3 to 4	
570	H1, H2, H3	1 to 6	
555	H1, H2, H3	3 to 6	
540	H1, H2, H3	5 to 6	

Secondary Volts

208			X1, X2, X3
120			X1 to X0 X2 to X0 X3 to X0
1 phase			

31 PRIMARY: 480 Volts Delta
SECONDARY: 480Y/277 Volts
TAPS: 2, 2¹/₂% ANFC, 4, 2¹/₂% BNFC

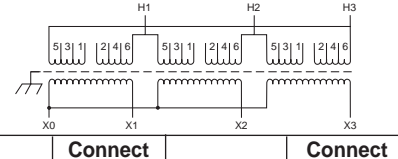


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
504	H1, H2, H3	1	
492	H1, H2, H3	2	
480	H1, H2, H3	3	
468	H1, H2, H3	4	
456	H1, H2, H3	5	
444	H1, H2, H3	6	
432	H1, H2, H3	7	

Secondary Volts

480			X1, X2, X3
277			X1 to X0 X2 to X0 X3 to X0
1 phase			

32 PRIMARY: 480 Volts Delta
SECONDARY: 480Y/277 Volts
TAPS: 2, 2¹/₂% ANFC, 4, 2¹/₂% BNFC

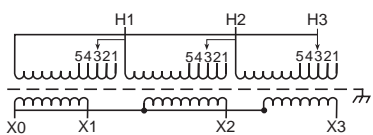


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
504	H1, H2, H3	1 to 2	
492	H1, H2, H3	2 to 3	
480	H1, H2, H3	1 to 4	
468	H1, H2, H3	3 to 4	
456	H1, H2, H3	1 to 6	
444	H1, H2, H3	3 to 6	
432	H1, H2, H3	5 to 6	

Secondary Volts

480			X1, X2, X3
277			X1 to X0 X2 to X0 X3 to X0
1 phase			

33 PRIMARY: 380 Volts Delta
SECONDARY: 208/120 Volts
TAPS: TAPS: 2-2¹/₂% ANFC and BNFC

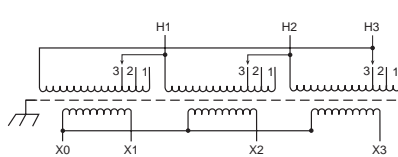


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
399	H1, H2, H3	1	
390	H1, H2, H3	2	
380	H1, H2, H3	3	
371	H1, H2, H3	4	
361	H1, H2, H3	5	

Secondary Volts

208			X1, X2, X3
120			X1 to X0 X2 to X0 X3 to X0
1 phase			

34 PRIMARY: 460 Volts Delta
SECONDARY: 460Y/266 Volts
TAPS: 1-5% ANFC and BNFC

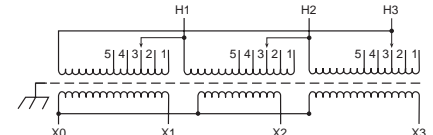


Primary Volts	%	Connect Leads to Tap No.
483	105	1
460	100	2
437	95	3

Secondary Volts

460			X1, X2, X3
266			X1 & X0 X2 & X0 X3 & X0
1 phase			

35 PRIMARY: 460 Volts Delta
SECONDARY: 460Y/266 Volts
TAPS: 2-2¹/₂% ANFC and BNFC

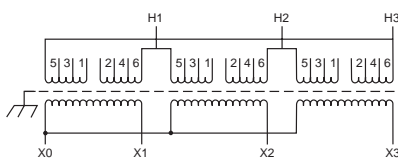


Primary Volts	%	Connect Leads to Tap No.
483	105	1
472	102.5	2
460	100	3
449	97.5	4
437	95	5

Secondary Volts

460			X1, X2, X3
266			X1 & X0 X2 & X0 X3 & X0
1 phase			

36 PRIMARY: 460 Volts Delta
SECONDARY: 460Y/266 Volts
TAPS: 2-2¹/₂% ANFC and BNFC

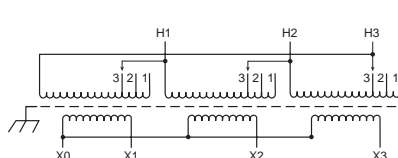


Primary Volts	%	Connect Leads to Tap No.
483	105	1 to 2
472	102.5	2 to 3
460	100	1 to 4
449	97.5	3 to 4
437	95	4 to 5

Secondary Volts

460			X1, X2, X3
266			X1 & X0 X2 & X0 X3 & X0
1 phase			

37 PRIMARY: 460 Volts Delta
SECONDARY: 230Y/133 Volts
TAPS: 1-5% ANFC and BNFC

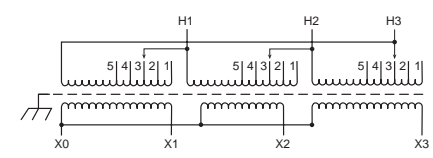


Primary Volts	%	Connect Leads to Tap No.
483	105	1
460	100	2
437	95	3

Secondary Volts

230			X1, X2, X3
133			X1 & X0 X2 & X0 X3 & X0
1 phase			

38 PRIMARY: 460 Volts Delta
SECONDARY: 230Y/133 Volts
TAPS: 2-2¹/₂% ANFC and BNFC

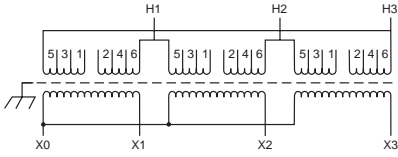


Primary Volts	%	Connect Leads to Tap No.
483	105	1
472	102.5	2
460	100	3
449	97.5	4
437	95	5

Secondary Volts

230			X1, X2, X3
133			X1 & X0 X2 & X0 X3 & X0
1 phase			

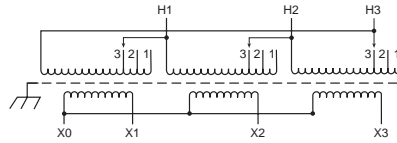
39 PRIMARY: 460 Volts Delta
SECONDARY: 230Y/133 Volts
TAPS: 2-2¹/₂% ANFC and BNFC



Primary Volts	%	Connect Leads to Tap No.
483	105	1 to 2
472	102.5	2 to 3
460	100	1 to 4
449	97.5	3 to 4
437	95	4 to 5

Secondary Volts		
230		X1, X2, X3
133		X1 & X0 X2 & X0 X3 & X0
1 phase		

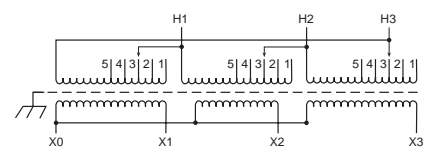
40 PRIMARY: 575 Volts Delta
SECONDARY: 230Y/133 Volts
TAPS: 1-5% ANFC and BNFC



Primary Volts	%	Connect Leads to Tap No.
604	105	1
575	100	2
546	95	3

Secondary Volts		
230		X1, X2, X3
133		X1 & X0 X2 & X0 X3 & X0
1 phase		

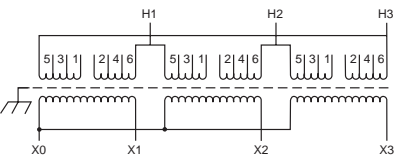
41 PRIMARY: 575 Volts Delta
SECONDARY: 230Y/133 Volts
TAPS: 2-2¹/₂% ANFC and BNFC



Primary Volts	%	Connect Leads to Tap No.
604	105	1
589	102.5	2
575	100	3
561	97.5	4
546	95	5

Secondary Volts		
230		X1, X2, X3
133		X1 & X0 X2 & X0 X3 & X0
1 phase		

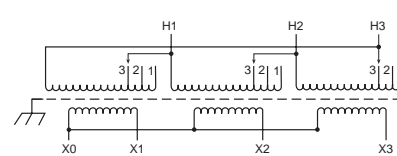
42 PRIMARY: 575 Volts Delta
SECONDARY: 230Y/133 Volts
TAPS: 2-2¹/₂% ANFC and BNFC



Primary Volts	%	Connect Leads to Tap No.
604	105	1 to 2
589	102.5	2 to 3
575	100	1 to 4
561	97.5	3 to 4
546	95	4 to 5

Secondary Volts		
230		X1, X2, X3
133		X1 & X0 X2 & X0 X3 & X0
1 phase		

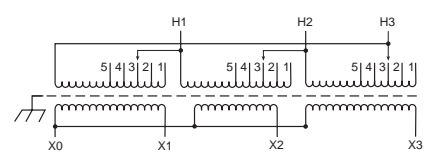
43 PRIMARY: 575 Volts Delta
SECONDARY: 460Y/266 Volts
TAPS: 1-5% ANFC and BNFC



Primary Volts	%	Connect Leads to Tap No.
604	105	1
575	100	2
546	95	3

Secondary Volts		
460		X1, X2, X3
266		X1 & X0 X2 & X0 X3 & X0
1 phase		

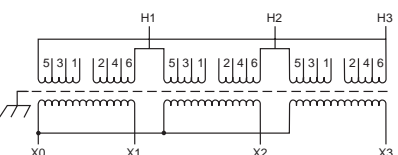
44 PRIMARY: 575 Volts Delta
SECONDARY: 460Y/266 Volts
TAPS: 2-2¹/₂% ANFC and BNFC



Primary Volts	%	Connect Leads to Tap No.
604	105	1
589	102.5	2
575	100	3
561	97.5	4
546	95	5

Secondary Volts		
460		X1, X2, X3
266		X1 & X0 X2 & X0 X3 & X0
1 phase		

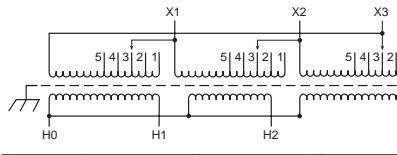
45 PRIMARY: 575 Volts Delta
SECONDARY: 460Y/266 Volts
TAPS: 2-2¹/₂% ANFC and BNFC



Primary Volts	%	Connect Leads to Tap No.
604	105	1 to 2
589	102.5	2 to 3
575	100	1 to 4
561	97.5	3 to 4
546	95	4 to 5

Secondary Volts		
460		X1, X2, X3
266		X1 & X0 X2 & X0 X3 & X0
1 phase		

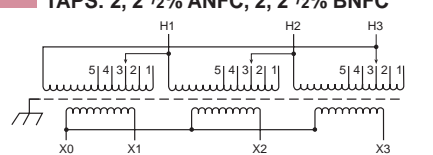
46 PRIMARY: 208 Volts Delta
SECONDARY: 480Y/277 Volts
TAPS: 2, 2¹/₂% ANFC, 2, 2¹/₂% BNFC



Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
218	X1, X2, X3	1	
213	X1, X2, X3	2	
208	X1, X2, X3	3	
203	X1, X2, X3	4	
198	X1, X2, X3	5	

Secondary Volts			
480			H1, H2, H3
277			H1 to H0 H2 to H0 H3 to H0
1 phase			

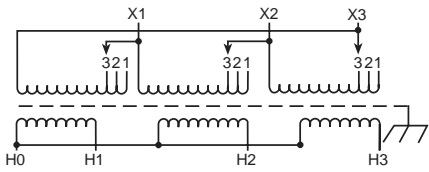
47 PRIMARY: 416 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 2¹/₂% ANFC, 2, 2¹/₂% BNFC



Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
437	H1, H2, H3	1	
426	H1, H2, H3	2	
416	H1, H2, H3	3	
406	H1, H2, H3	4	
395	H1, H2, H3	5	

Secondary Volts			
208			X1, X2, X3
120			X1 to X0 X2 to X0 X3 to X0
1 phase			

48 PRIMARY: 208 Volts Delta
SECONDARY: 480Y/277 Volts
TAPS: 2, 5% BNFC

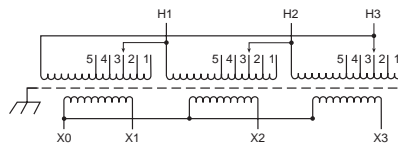


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
208	X1, X2, X3	1	
198	X1, X2, X3	2	
187	X1, X2, X3	3	

Secondary Volts

480			H1, H2, H3
277 1 phase			H1 to H0 H2 to H0 H3 to H0

49 PRIMARY: 600 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 2 1/2% ANFC, 2, 2 1/2% BNFC

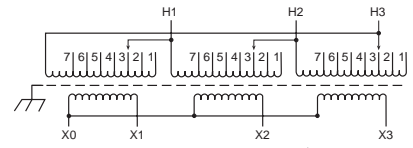


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
630	H1, H2, H3	1	
615	H1, H2, H3	2	
600	H1, H2, H3	3	
585	H1, H2, H3	4	
570	H1, H2, H3	5	

Secondary Volts

208 1 phase			X1, X2, X3 X1 to X0 X2 to X0 X3 to X0
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50 PRIMARY: 600 Volts Delta
SECONDARY: 380Y/220 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC

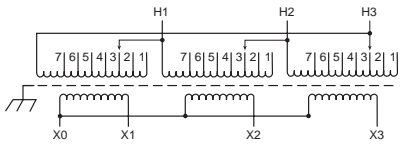


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
630	H1, H2, H3	1	
615	H1, H2, H3	2	
600	H1, H2, H3	3	
585	H1, H2, H3	4	
570	H1, H2, H3	5	
555	H1, H2, H3	6	
540	H1, H2, H3	7	

Secondary Volts

380 1 phase			X1, X2, X3 X1 to X0 X2 to X0 X3 to X0
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51 PRIMARY: 600 Volts Delta
SECONDARY: 480Y/277 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC

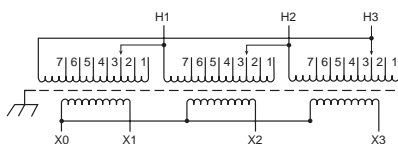


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
630	H1, H2, H3	1	
615	H1, H2, H3	2	
600	H1, H2, H3	3	
585	H1, H2, H3	4	
570	H1, H2, H3	5	
555	H1, H2, H3	6	
540	H1, H2, H3	7	

Secondary Volts

480			X1, X2, X3
277 1 phase			X1 to X0 X2 to X0 X3 to X0

52 PRIMARY: 600 Volts Delta
SECONDARY: 600Y/347 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC

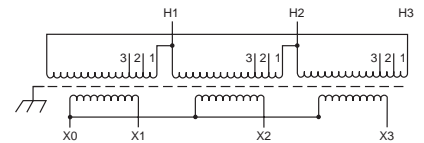


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
630	H1, H2, H3	1	
615	H1, H2, H3	2	
600	H1, H2, H3	3	
585	H1, H2, H3	4	
570	H1, H2, H3	5	
555	H1, H2, H3	6	
540	H1, H2, H3	7	

Secondary Volts

600 1 phase			X1, X2, X3 X1 to X0 X2 to X0 X3 to X0
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53 PRIMARY: 600 Volts Delta
SECONDARY: 380Y/220 Volts
TAPS: 2, 5% BNFC

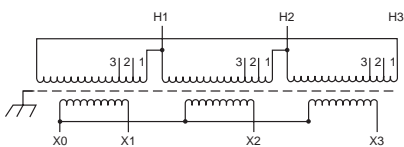


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
600	H1, H2, H3	1	
570	H1, H2, H3	2	
540	H1, H2, H3	3	

Secondary Volts

380 1 phase			X1, X2, X3 X1 to X0 X2 to X0 X3 to X0
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54 PRIMARY: 600 Volts Delta
SECONDARY: 600Y/347 Volts
TAPS: 2, 5% BNFC

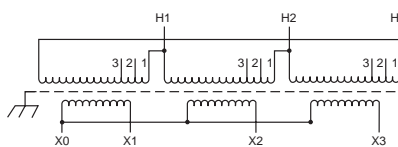


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
600	H1, H2, H3	1	
570	H1, H2, H3	2	
540	H1, H2, H3	3	

Secondary Volts

600 1 phase			X1, X2, X3 X1 to X0 X2 to X0 X3 to X0
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55 PRIMARY: 600 Volts Delta
SECONDARY: 480Y/277 Volts
TAPS: 2, 5% BNFC

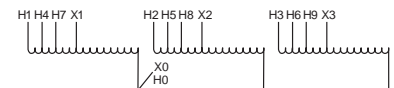


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
600	H1, H2, H3	1	
570	H1, H2, H3	2	
540	H1, H2, H3	3	

Secondary Volts

480 1 phase			X1, X2, X3 X1 to X0 X2 to X0 X3 to X0
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56 PRIMARY: 600 Volts
SECONDARY: 480 Volts
TAPS: 2, 5% BNFC

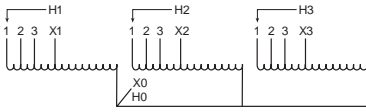


Primary Volts	Alt Rating	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
600	480	H1, H2, H3		
570	456	H4, H5, H6		
540	432	H7, H8, H9		

Secondary Volts

480 1 phase	380 1 phase			X1, X2, X3 X1 to X0 X2 to X0 X3 to X0
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57 PRIMARY: 600 Volts
SECONDARY: 480 Volts
TAPS: 2, 5% BNFC

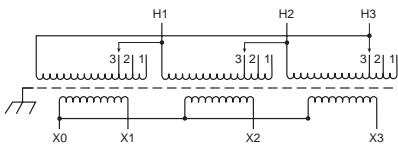


Primary Volts	Alt Rating	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
600	480	H1, H2, H3	1	
570	456	H1, H2, H3	2	
540	432	H1, H2, H3	3	

Secondary Volts

480	380			X1, X2, X3
277	220			X1 to X0 X2 to X0 X3 to X0

60 PRIMARY: 208 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2-5% BNFC

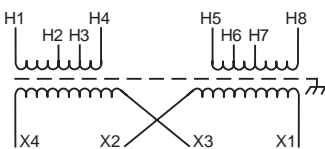


Primary Volts	%	Connect Leads to Tap No.
208	100	1
198	95	2
187	90	3

Secondary Volts

208		X1, X2, X3
120		X1 & X0 X2 & X0 X3 & X0

63 PRIMARY: 120/208/240/277 Volts
SECONDARY: 120/240 Volts

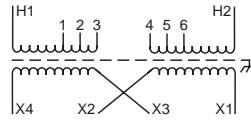


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
120	H1 & H8	H1 to H6 H3 to H8	
208	H1 & H8	H2 to H7	
240	H1 & H8	H3 to H6	
277	H1 & H8	H4 to H5	

Secondary Volts

240		X2 to X3	X1 & X4
120/240		X2 to X3	X1, X3, X4
120		X1 to X3 X2 to X4	X1 & X4

58 PRIMARY: 208 Volts
SECONDARY: 120/240 Volts
TAPS: 2, 5% BNFC

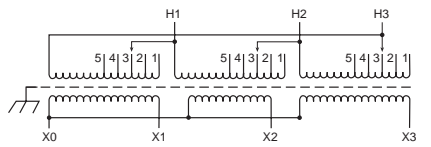


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
208	H1 & H2	3 to 4	
198	H1 & H2	2 to 5	
187	H1 & H2	1 to 6	

Secondary Volts

240		X2 to X3	X1-X4
120/240		X2 to X3	X1-X2-X4
120		X1 to X3 X2 to X4	X1-X4

61 PRIMARY: 208 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2-2 1/2% ANFC and 2-2 1/2% BNFC

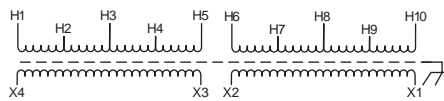


Primary Volts	%	Connect Leads to Tap No.
218	105	1
213	102.5	2
208	100	3
203	97.5	4
198	95	5

Secondary Volts

208		X1, X2, X3
120		X1 & X0 X2 & X0 X3 & X0

64 PRIMARY: 190/208/220/240 x
380/440/480 Volts
SECONDARY: 120/240 Volts

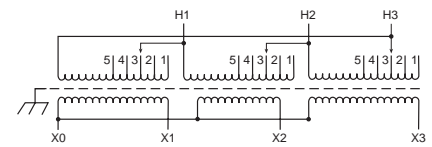


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
190	H1 & H7	H1 to H6 H2 to H7	
208	H1 & H8	H1 to H6 H3 to H8	
220	H1 & H9	H1 to H6 H4 to H9	
240	H1 & H10	H1 to H6 H5 to H10	
380	H1 & H7	H2 to H6	
416	H1 & H8	H3 to H6	
440	H1 & H9	H4 to H6	
480	H1 & H10	H5 to H6	

Secondary Volts

240		X2 to X3	X1 - X4
120/240		X2 to X3	X1- X2 - X4
120		X1 to X3 X2 to X4	X1 - X4

59 PRIMARY: 230 Volts Delta
SECONDARY: 230Y/133 Volts
TAPS: 2-2 1/2% ANFC and 2-2 1/2% BNFC

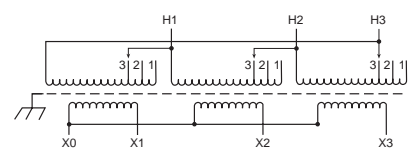


Primary Volts	%	Connect Leads to Tap No.
242	105	1
236	102.5	2
230	100	3
224	97.5	4
219	95	5

Secondary Volts

230		X1, X2, X3
133		X1 & X0 X2 & X0 X3 & X0

62 PRIMARY: 230 Volts Delta
SECONDARY: 230Y/133 Volts
TAPS: 1-5% ANFC and 1-5% BNFC

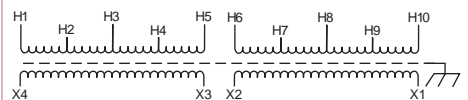


Primary Volts	%	Connect Leads to Tap No.
241	105	1
230	100	2
218	95	3

Secondary Volts

230		X1, X2, X3
133		X1 & X0 X2 & X0 X3 & X0

65 PRIMARY: 190/200/208/220 x
380/400/416/440 Volts
SECONDARY: 110/220 Volts

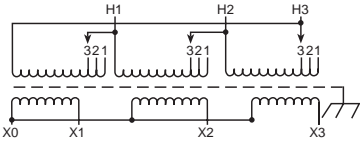


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
190	H1 & H7	H1 to H6 H2 to H7	
200	H1 & H8	H1 to H6 H3 to H8	
208	H1 & H9	H1 to H6 H4 to H9	
220	H1 & H10	H1 to H6 H5 to H10	
380	H1 & H7	H2 to H6	
400	H1 & H8	H3 to H6	
415	H1 & H9	H4 to H6	
440	H1 & H10	H5 to H6	

Secondary Volts

220		X2 to X3	X1-X4
110/220		X2 to X3	X1-X2-X4
110		X1 to X3 X2 to X4	X1-X4

66 PRIMARY: 416 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 5% BNFC

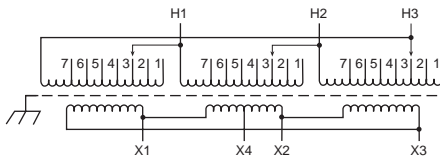


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
437	H1, H2, H3	1	
416	H1, H2, H3	2	
395	H1, H2, H3	3	

Secondary Volts

208			X1, X2, X3
120			X1 to X0 X2 to X0 X3 to X0
1 phase			

69 PRIMARY: 600 Volts Delta
SECONDARY: 240 Delta/120 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC

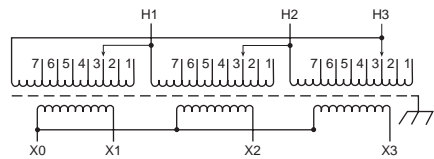


Primary Volts	%	Connect Leads to Tap No.
630	105	1
615	102.5	2
600	100	3
585	97.5	4
570	95	5
555	92.5	6
540	90	7

Secondary Volts

240			X1, X2, X3
120			X1, X4, or X2, X4

72 PRIMARY: 380 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC

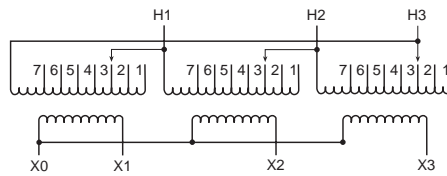


Primary Volts	%	Connect Leads to Tap No.
399	105	1
390	102.5	2
380	100	3
371	97.5	4
361	95	5
352	92.5	6
342	90	7

Secondary Volts

208			X1, X2, X3
120			X1 to X0 X2 to X0 X3 to X0
1 phase			

67 PRIMARY: 480 Volts Delta
SECONDARY: 208Y/120 Volts
TAPS: 2-2 1/2% ANFC, 4, 2 1/2% BNFC

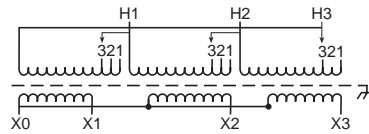


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
504	H1, H2, H3	1	
492	H1, H2, H3	2	
480	H1, H2, H3	3	
468	H1, H2, H3	4	
456	H1, H2, H3	5	
444	H1, H2, H3	6	
432	H1, H2, H3	7	

Secondary Volts

208			X1, X2, X3
120			X1 to X0 X2 to X0 X3 to X0
1 phase			

70 PRIMARY: 240 Volts Delta
SECONDARY: 480Y/277 Volts
TAPS: 2, 5% BNFC

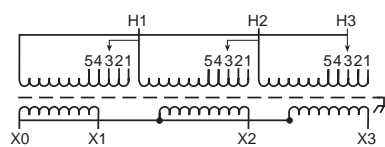


Primary Volts	%	Connect Leads to Tap No.
240	100	1
228	95	2
216	90	3

Secondary Volts

480			X1, X2, X3
277			X1 to X0 X2 to X0 X3 to X0
1 phase			

73 PRIMARY: 440 Volts Delta
SECONDARY: 220Y/127 Volts
TAPS: 2, 5% ANFC & BNFC

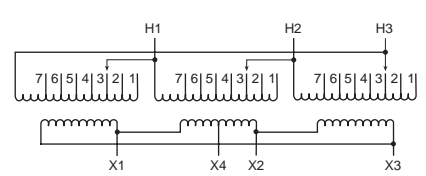


Primary Volts	%	Connect Leads to Tap No.
484	110	1
462	105	2
440	100	3
418	95	4
396	90	5

Secondary Volts

220			X1, X2, X3
127			X1 to X0 X2 to X0 X3 to X0
1 phase			

68 PRIMARY: 480 Volts Delta
SECONDARY: 240 Volts Delta/120 Volts
TAPS: 2, 2 1/2% ANFC, 4, 2 1/2% BNFC

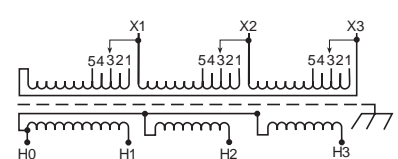


Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
504	H1, H2, H3	1	
492	H1, H2, H3	2	
480	H1, H2, H3	3	
468	H1, H2, H3	4	
456	H1, H2, H3	5	
444	H1, H2, H3	6	
432	H1, H2, H3	7	

Secondary Volts

240			X1, X2, X4
120			X1, X4, or X2, X4

71 PRIMARY: 240 Volts Delta
SECONDARY: 480Y/277 Volts
TAPS: 2, 2 1/2% ANFC & BNFC



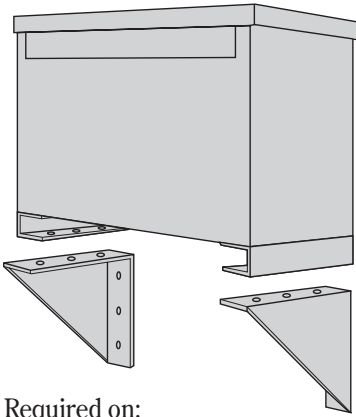
Primary Volts	Connect Primary Lines To	Inter-Connect	Connect Secondary Lines To
252	X1, X2, X3	1	
246	X1, X2, X3	2	
240	X1, X2, X3	3	
234	X1, X2, X3	4	
228	X1, X2, X3	5	

Secondary Volts

480			H1, H2, H3
277			H1 to H0 H2 to H0 H3 to H0
1 phase			

Wall Brackets, Taps, Thermal Switches and Lug Kits

Wall Mounting Brackets



Required on:

Ventilated Units:

1Ø, 37.5 and 50 KVA
3Ø, 30, 45 and 75 KVA

Catalog Number: PL-79912

Encapsulated Units:

3Ø DIT., 11 KVA — 20 KVA
3Ø std. distribution — 15 KVA

Catalog Number: PL-79911

Wall mounting brackets are not required on:

1Ø units — 25 KVA and below
3Ø units — 9 KVA and below

Standard Taps

The catalog number suffix provides tap information as outlined below:

Suffix	Tap Arrangement
- 1S	Two 5% (-) BNFC Taps
- 2S	One 5% (+) ANFC Tap and One 5% (-) BNFC Tap
- 3S	Two 2½% (+) ANFC Taps and Four 2½%(-) BNFC Taps
- 4S	Two 2½% (+) ANFC Taps and Two 2½% (-) BNFC Taps
- 5S	Two 5% (+) ANFC Taps and Two 5% (-) BNFC Taps

If the catalog number has no suffix, there are no taps available.

EXAMPLE: T-2-53019-3S

The suffix 3S indicates the unit has two 2.5% (+) ANFC taps and four 2.5% (-) BNFC taps.

Thermal Switch Kit

Thermal Switch Kits are designed for use with single and three phase drive isolation and distribution transformers. Thermal switch kits are available for one or three sensor systems.

Thermal sensors can be field or factory installed in the transformer winding ducts to detect abnormal temperatures. The thermal sensors are a normally closed contact that opens at 200°C ± 10°C and has a current capacity of 5 amps @ 120V or 2.5 amps @ 240V. This contact can activate any number of different types of alarms or mechanisms that could warn of a potential failure.

Catalog Number: PL-79900

KVA	Mounting Position	Illustration
27.0 - 220.0	Bottom of the case	Figure 1
275.0- 750	Top Flange of the Core Bracket	Figure 2

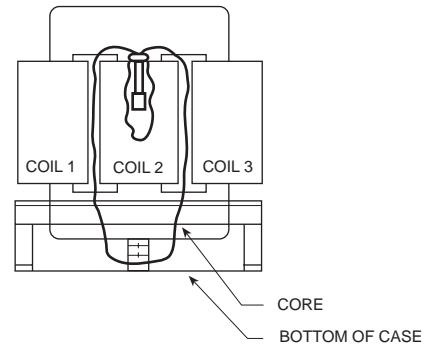


Figure 1

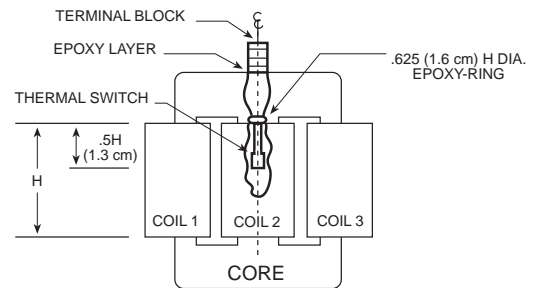


Figure 2

Lug Kits

Our mechanical transformer lug kits contain all of the hardware necessary to provide satisfactory transformer terminations. Lug kits are available in sizes from 27 KVA to 660 KVA.

Our lugs are of the dual rated single pole solderless type, made from high strength aluminum alloy. To provide the best in low contact resistance, all lugs in these kits are plated.

Catalog No.	Transformer KVA Size	Wire Range Al or Cu	Kit Contains		
			Qty	Nuts & Bolts	Qty
Lug 1	37½ 1-phase	2 -14	8	¼ - 20 x ¾	8
	27 -45 3-phase	250 mcm - 6	4		
Lug 2	50 - 75 1-phase	250 mcm - 6	12	¼ - 20 x ¾	8
	51 - 118 3-phase		¼ - 20 x 1¾		
Lug 3	100 -167 1-phase	250 mcm - 6	3	¼ - 20 x ¾	3
	145 - 300 3-phase	600 mcm - 2	22		
Lug 4	440 - 660 3-phase	600 mcm - 2	29	⅜ - 16 x 2	8