

SELECTION CHARTS

SINGLE PHASE

GROUP I



SINGLE PHASE		BOOSTING								BUCKING					
Line Voltage (Available)		95	100	105	110	189	208	215	220	125	132	230	245	250	252
Load Voltage (Output)		114	120	115	120	208	230	237	242	113	120	208	222	227	240
CAT. NO.															
T-1-81047	Load KVA Amps	0.24 2.08	0.25 2.08	0.48 4.17	0.50 4.17	0.43 2.08	0.48 2.08	0.49 2.08	0.50 2.08	0.52 4.60	0.54 4.60	0.47 2.28	0.50 2.28	0.52 2.28	1.02 4.37
	Max. Size of Fuse or Breaker	6	6	10	10	6	6	6	6	10	10	6	6	6	10
T-1-81048	Load KVA Amps	0.47 4.17	0.50 4.17	0.96 8.33	1.01 8.33	0.87 4.17	0.96 4.17	0.99 4.17	1.01 4.17	1.04 9.20	1.08 9.20	0.95 4.56	1.00 4.56	1.04 4.58	2.04 8.75
	Max. Size of Fuse or Breaker	10	10	15	15	10	10	10	10	15	15	10	10	10	15
T-1-81049	Load KVA Amps	0.71 6.25	0.75 6.25	1.43 12.50	1.51 12.50	1.30 6.25	1.43 6.25	1.48 6.25	1.51 6.25	1.56 13.80	1.62 13.80	1.42 6.86	1.50 6.86	1.56 6.86	3.00 13.10
	Max. Size of Fuse or Breaker	15	15	20	20	15	15	15	15	20	20	15	15	15	15
T-1-81050	Load KVA Amps	1.19 10.42	1.25 10.40	2.40 20.80	2.50 20.80	2.16 10.40	2.39 10.40	2.46 10.40	2.52 10.40	2.60 22.80	2.75 22.80	2.37 11.40	2.50 11.40	2.60 11.40	5.10 21.80
	Max. Size of Fuse or Breaker	25	25	40	30	15	15	15	15	30	30	15	15	15	30
T-1-81051	Load KVA Amps	2.37 20.83	2.50 20.83	4.80 41.67	5.00 41.67	4.33 20.83	4.79 20.83	4.93 20.83	5.04 20.83	5.20 46.80	5.40 46.80	4.47 22.80	5.00 22.80	5.20 22.80	10.20 43.70
	Max. Size of Fuse or Breaker	35	35	60	60	30	30	30	30	60	60	30	30	30	60
T-1-81052	Load KVA Amps	3.56 31.25	3.75 31.25	7.17 62.50	7.56 62.50	6.50 31.25	7.19 31.25	7.41 31.25	7.56 31.25	7.80 68.50	8.15 69.50	7.10 34.40	7.50 34.40	7.80 34.40	15.30 65.50
	Max. Size of Fuse or Breaker	50	50	90	90	45	45	45	45	80	80	40	40	40	80
T-1-11683	Load KVA Amps	4.75 41.67	5.00 41.67	9.58 83.31	10.00 83.31	8.66 41.67	9.58 41.67	9.87 41.67	10.00 41.67	10.40 91.50	10.80 91.50	9.50 45.80	10.00 45.80	10.00 45.80	20.40 87.50
	Max. Size of Fuse or Breaker	70	70	125	125	60	60	60	60	110	110	60	60	50	110
T-1-11684	Load KVA Amps	7.12 62.50	7.50 62.50	14.40 125.00	15.10 125.00	13.00 62.50	14.30 62.50	14.80 62.50	15.10 62.50	15.00 138.00	16.20 138.00	14.24 68.60	15.00 68.60	15.60 68.60	30.60 132.00
	Max. Size of Fuse or Breaker	100	100	175	175	90	90	90	90	150	175	80	80	80	175
T-1-11685	Load KVA Amps	9.50 83.30	10.00 83.30	19.20 166.60	20.20 166.60	17.30 83.30	19.16 83.30	19.70 83.30	20.10 83.30	20.80 183.00	21.60 183.00	19.00 91.60	20.00 91.60	20.30 91.20	40.80 175.00
	Max. Size of Fuse or Breaker	125	125	250	250	125	125	125	125	225	225	110	110	110	225
T-1-11686	Load KVA Amps	14.20 125.00	15.00 125.00	28.80 250.00	30.00 250.00	26.00 125.00	28.70 125.00	29.60 125.00	30.30 125.00	31.20 275.00	32.50 275.00	28.50 136.80	30.00 136.80	31.20 136.80	61.00 263.00
	Max. Size of Fuse or Breaker	200	200	350	350	175	175	175	175	350	350	175	175	175	350
T-1-11687	Load KVA Amps	23.70 208.00	25.00 208.00	47.90 416.60	50.00 416.60	43.30 208.00	47.80 208.00	49.30 208.00	50.30 208.00	52.00 457.00	54.00 457.00	47.40 228.00	50.00 228.00	52.00 228.00	102.00 437.00
	Max. Size of Fuse or Breaker	350	350	600	600	300	300	300	300	600	600	300	300	300	600
T-2-11688 ①	Load KVA Amps	35.60 312.50	37.50 312.50	71.90 625.00	75.60 625.00	65.00 312.50	71.80 312.50	74.00 312.50	75.60 312.50	78.00 688.00	81.00 688.00	71.00 344.00	76.00 344.00	78.00 344.00	153.00 655.00
	Max. Size of Fuse or Breaker	500	500	1000	1000	450	450	450	450	800	800	400	400	400	800
T-2-11689 ①	Load KVA Amps	47.50 416.60	50.00 416.60	95.80 833.30	100.00 833.30	86.60 416.60	95.80 416.60	98.70 416.60	101.00 416.60	104.00 915.00	108.00 915.00	95.00 458.00	100.00 458.00	104.00 458.00	204.00 875.00
	Max. Size of Fuse or Breaker	700	700	1200	1200	600	600	600	600	1200	1200	600	600	600	1200

See Page 118 For Connection Diagrams **D** **D** **C** **C** **H** **H** **H** **H** **F** **F** **I** **I** **I** **E**

① See chart on page 117, for number of leads per termination.

NOTE: Inputs and Outputs may be reversed; KVA capacity remains constant. All applications above bold face line are suitable for 50/60 Hz. All applications below bold face line are suitable for 60 Hz only.

With larger KVA buck-boost units, it is necessary to utilize multiple conductors on the secondary (X) terminals as shown in the chart on page 117.



GROUP II

SINGLE PHASE		BOOSTING							
Line Voltage (Available)		95	100	105	208	215	215	220	225
Load Voltage (Output)		120	114	119	240	244	230	235	240
CAT. NO.									
T-1-81054	Load KVA	0.19	0.36	0.37	0.38	0.38	0.72	0.73	0.75
	Amps	1.56	3.13	3.13	1.56	1.56	3.13	3.13	3.13
	Max. Size of Fuse or Breaker	6	6	6	6	6	6	6	6
T-1-81055	Load KVA	0.38	0.71	0.74	0.75	0.76	1.44	1.47	1.50
	Amps	3.13	6.25	6.25	3.13	3.13	6.25	6.25	6.25
	Max. Size of Fuse or Breaker	10	15	6	6	15	15	15	15
T-1-81056	Load KVA	0.56	1.07	1.12	1.13	1.14	2.16	2.20	2.25
	Amps	4.69	9.38	9.38	4.69	4.69	9.38	9.38	9.38
	Max. Size of Fuse or Breaker	10	15	15	10	10	15	15	15
T-1-81057	Load KVA	0.94	1.78	1.86	1.88	1.91	3.59	3.67	3.75
	Amps	7.81	15.63	15.63	7.81	7.81	15.63	15.63	15.63
	Max. Size of Fuse or Breaker	15	25	25	15	15	25	25	25
T-1-81058	Load KVA	1.88	3.56	3.72	3.75	3.81	7.19	7.34	7.50
	Amps	15.63	31.25	31.25	15.63	15.63	31.25	31.25	31.25
	Max. Size of Fuse or Breaker	25	45	45	25	25	45	45	45
T-1-81059	Load KVA	2.81	5.34	5.58	5.63	5.72	10.78	11.02	11.25
	Amps	23.44	46.88	46.88	23.44	23.44	46.88	46.88	46.88
	Max. Size of Fuse or Breaker	40	70	70	40	40	70	70	70
T-1-13073	Load KVA	3.75	7.13	7.44	7.50	7.63	14.38	14.69	15.00
	Amps	31.25	62.50	62.50	31.25	31.25	62.50	62.50	62.50
	Max. Size of Fuse or Breaker	50	90	90	50	50	90	90	90
T-1-13074	Load KVA	5.63	10.69	11.16	11.25	11.44	21.56	22.03	22.50
	Amps	46.90	93.80	93.80	46.90	46.90	93.80	93.80	93.80
	Max. Size of Fuse or Breaker	80	150	150	70	70	125	125	125
T-1-13075	Load KVA	7.50	14.25	14.88	15.00	15.25	28.75	29.38	30.00
	Amps	62.50	125.00	125.00	62.50	62.50	125.00	125.00	125.00
	Max. Size of Fuse or Breaker	100	200	200	90	90	175	175	175
T-1-13076	Load KVA	11.25	21.38	22.31	22.50	22.88	43.13	44.06	45.00
	Amps	93.80	187.50	187.50	93.80	93.80	187.50	187.50	187.50
	Max. Size of Fuse or Breaker	150	300	300	150	150	250	250	250
T-1-13077	Load KVA	18.75	35.63	37.19	37.50	38.13	71.88	73.44	75.00
	Amps	156.30	312.50	312.50	156.30	156.30	312.50	312.50	312.50
	Max. Size of Fuse or Breaker	250	450	450	225	225	450	450	450
T-2-13078 ①	Load KVA	28.10	53.40	55.80	56.30	57.20	107.80	110.20	112.50
	Amps	234.40	468.80	468.80	234.40	234.40	468.80	468.80	468.80
	Max. Size of Fuse or Breaker	400	700	700	350	350	700	700	700
T-2-13079 ①	Load KVA	37.50	71.30	74.40	75.00	76.30	143.80	146.90	150.00
	Amps	312.50	625.00	625.00	312.50	312.50	625.00	625.00	625.00
	Max. Size of Fuse or Breaker	500	1000	1000	450	450	1000	1000	1000
See Page 118 For Connection Diagrams		D	C	C	H	H	G	G	G

BUCKING					
135	240	240	245	250	255
119	208	225	230	234	239
0.42	0.37	0.75	0.77	0.78	0.80
3.54	1.77	3.33	3.33	3.33	3.33
6	3	6	6	6	6
0.84	0.74	1.50	1.53	1.56	1.59
7.08	3.54	6.67	6.67	6.67	6.67
15	6	15	15	15	15
1.26	1.11	2.25	2.30	2.34	2.39
10.63	5.31	10.00	10.00	10.00	10.00
15	6	15	15	15	15
2.11	1.84	3.75	3.83	3.90	3.98
17.71	8.85	16.67	16.67	16.67	16.67
20	15	20	20	20	20
4.21	3.68	7.50	7.67	7.80	7.97
35.42	17.71	33.33	33.33	33.33	33.33
40	20	40	40	40	40
6.32	5.53	11.25	11.50	11.70	11.95
53.13	26.56	50.00	50.00	50.00	50.00
60	30	60	60	60	60
8.43	7.37	15.00	15.33	15.60	15.93
70.83	35.42	66.67	66.67	66.67	66.67
80	40	80	80	80	80
12.64	11.05	22.50	23.00	23.40	23.90
106.30	53.10	100.00	100.00	100.00	100.00
125	60	125	125	125	125
16.86	14.73	30.00	30.67	31.20	31.87
141.70	70.80	133.30	133.30	133.30	133.30
175	80	175	175	175	175
25.29	22.10	45.00	46.00	46.80	47.80
212.50	106.30	200.00	200.00	200.00	200.00
250	125	250	250	250	250
42.15	36.83	75.00	76.67	78.00	79.67
354.20	177.10	333.30	333.30	333.30	333.30
400	200	400	400	400	400
63.20	55.30	112.50	115.00	117.00	119.50
531.30	265.60	500.00	500.00	500.00	500.00
600	300	600	600	600	600
84.30	73.70	150.00	153.30	156.00	159.30
708.30	354.20	666.70	666.70	666.70	666.70
800	400	800	800	800	800
F	I	E	E	E	E

① See chart on page 117.

NOTE: Inputs and Outputs may be reversed; KVA capacity remains constant. All applications above bold face line are suitable for 50/60 Hz. All applications below bold face line are suitable for 60 Hz only.

With larger KVA buck-boost units, it is necessary to utilize multiple conductors on the secondary (X) terminals as shown in the chart on page 117.

GROUP III



SINGLE PHASE			BOOSTING									
Line Voltage (Available)			230	380	416	425	430	435	440	440	450	460
Load Voltage (Output)			277	420	457	467	473	457	462	484	472	483
CAT. NO.												
T-1-81061	Load	KVA Amps	0.29 1.04	0.44 1.04	0.48 1.04	0.49 1.04	0.49 1.04	0.95 2.08	0.96 2.08	0.50 1.04	0.98 2.08	1.01 2.08
	Max. Size of Fuse or Breaker		3	3	3	3	3	6	6	3	6	6
T-1-81062	Load	KVA Amps	0.58 2.08	0.87 2.08	0.95 2.08	0.97 2.08	0.99 2.08	1.90 4.17	1.93 4.17	1.01 2.08	1.97 4.17	2.01 4.17
	Max. Size of Fuse or Breaker		6	6	6	6	6	10	10	6	10	10
T-1-81063	Load	KVA Amps	0.87 3.13	1.31 3.13	1.43 3.13	1.46 3.13	1.48 3.13	2.86 6.25	2.89 6.25	1.51 3.13	2.95 6.25	3.02 6.25
	Max. Size of Fuse or Breaker		10	6	6	6	6	15	15	6	15	15
T-1-81064	Load	KVA Amps	1.44 5.21	2.19 5.21	2.38 5.21	2.43 5.21	2.46 5.21	4.76 5.21	4.81 10.42	2.52 5.21	4.92 10.42	5.03 10.42
	Max. Size of Fuse or Breaker		15	10	10	10	10	15	15	10	15	15
T-1-81065	Load	KVA Amps	2.89 10.42	4.38 10.42	4.76 10.42	4.86 10.42	4.93 10.42	9.52 20.83	9.62 20.83	5.04 10.42	9.83 20.83	10.06 20.83
	Max. Size of Fuse or Breaker		20	15	15	15	15	30	30	15	30	30
T-1-81066	Load	KVA Amps	4.33 15.63	6.56 15.63	7.14 15.63	7.30 15.63	7.39 15.63	14.28 31.25	14.44 31.25	7.56 15.63	14.75 31.25	15.09 31.25
	Max. Size of Fuse or Breaker		25	25	25	25	25	45	45	25	45	45
T-1-37920	Load	KVA Amps	5.77 20.83	8.57 20.83	9.52 20.83	9.73 20.83	9.85 20.83	19.04 41.67	19.25 41.67	10.08 20.83	19.67 41.67	20.13 41.67
	Max. Size of Fuse or Breaker		35	30	30	30	30	60	60	30	60	60
T-1-37921	Load	KVA Amps	8.66 31.25	13.13 31.25	14.28 31.25	14.59 31.25	14.78 31.25	28.56 62.50	28.88 62.50	15.13 31.25	29.50 62.50	30.19 62.50
	Max. Size of Fuse or Breaker		50	50	45	45	45	90	90	45	90	90
T-1-37922	Load	KVA Amps	11.54 41.67	17.50 41.67	19.04 41.67	19.46 41.67	19.71 41.67	38.08 83.33	38.50 83.33	20.17 41.67	39.33 83.33	40.25 83.33
	Max. Size of Fuse or Breaker		70	60	60	60	60	110	110	60	110	110
T-1-37923	Load	KVA Amps	17.31 62.50	26.25 62.50	28.56 62.50	29.19 62.50	29.56 62.50	57.13 125.00	57.75 125.00	30.25 62.50	59.00 125.00	60.38 125.00
	Max. Size of Fuse or Breaker		100	90	90	90	90	175	175	90	175	175
T-1-37924	Load	KVA Amps	28.90 104.20	43.80 104.20	47.60 104.20	48.60 104.20	49.30 104.20	95.20 208.30	96.20 208.30	50.40 104.20	98.30 208.30	100.60 208.30
	Max. Size of Fuse or Breaker		175	150	150	150	150	300	300	150	300	300
T-2-43570	Load	KVA Amps	43.30 156.30	65.60 156.30	71.40 156.30	73.00 156.30	73.90 156.30	142.80 312.50	144.40 312.50	75.60 156.30	147.50 312.50	150.90 312.50
	Max. Size of Fuse or Breaker		250	225	225	225	225	450	450	225	450	450
T-2-43571 ①	Load	KVA Amps	57.70 208.30	87.50 208.30	95.20 208.30	97.30 208.30	98.50 208.30	190.40 416.70	192.50 416.70	100.80 208.30	196.70 416.70	201.30 416.70
	Max. Size of Fuse or Breaker		350	300	300	300	300	600	600	300	600	600
See Page 118 For Connection Diagrams			D	H	H	H	H	G	G	H	G	G

BUCKING			
277	480	480	504
230	436	456	480
0.29 1.25	0.50 1.15	1.05 2.29	1.10 2.29
3	3	6	6
0.58 2.50	1.00 2.29	2.09 4.58	2.20 4.58
6	6	10	10
0.86 3.75	1.50 3.44	3.14 6.88	3.30 6.88
6	6	15	15
1.44 6.25	2.50 5.73	5.23 11.46	5.50 11.46
10	10	15	15
2.88 12.50	5.00 11.46	10.45 22.92	11.00 22.92
15	15	30	30
4.31 18.75	7.49 17.19	15.68 34.38	16.50 34.38
20	20	45	45
5.75 25.00	9.99 22.92	20.90 45.83	22.00 45.83
30	30	60	60
8.63 37.50	14.99 34.38	31.35 68.75	33.00 68.75
40	40	90	90
11.50 50.00	19.98 45.83	41.80 91.67	44.00 91.67
60	60	110	110
17.25 75.00	29.98 68.80	62.70 137.50	66.00 137.50
80	80	175	175
28.80 125.00	50.00 114.60	104.50 229.20	110.00 229.20
150	150	300	300
43.10 187.50	74.90 171.90	156.80 343.80	165.00 343.80
200	200	450	450
57.50 250.00	99.90 229.20	209.00 458.30	220.00 458.30
300	300	600	600
J	I	E	E

① See chart on page 117.

NOTE: Inputs and Outputs may be reversed; KVA capacity remains constant. All applications above bold face line are suitable for 50/60 Hz. All applications below bold face line are suitable for 60 Hz only.

SELECTION CHARTS

THREE PHASE

GROUP I



THREE PHASE			BOOSTING						
Line Voltage (Available)			189Y 109	196Y 113	201Y 116	208Y 120	189	208	220
Load Voltage (Output)			208	234	240	230	208	230	242
CAT. NO.									
T-1-81047	Load	KVA Amps	1.50 4.17	0.84 2.08	0.87 2.08	1.66 4.17	0.75 2.08	0.83 2.08	0.87 2.08
	Max. Size of Fuse or Breaker		10	6	6	10	6	6	6
T-1-81048	Load	KVA Amps	3.00 8.33	1.69 4.17	1.73 4.17	3.32 8.33	1.50 4.17	1.66 4.17	1.75 4.17
	Max. Size of Fuse or Breaker		15	10	10	15	10	10	10
T-1-81049	Load	KVA Amps	4.50 12.50	2.53 6.25	2.60 6.25	4.98 12.50	2.25 6.25	2.49 6.25	2.62 6.25
	Max. Size of Fuse or Breaker		20	15	15	20	15	15	15
T-1-81050	Load	KVA Amps	7.51 20.83	4.22 10.42	4.33 10.42	8.30 20.83	3.75 10.42	4.15 10.42	4.37 10.42
	Max. Size of Fuse or Breaker		30	20	20	30	15	15	15
T-1-81051	Load	KVA Amps	15.01 41.67	8.44 20.83	8.66 20.83	16.60 41.67	7.51 20.83	8.30 20.83	8.73 20.83
	Max. Size of Fuse or Breaker		60	35	35	60	30	30	30
T-1-81052	Load	KVA Amps	22.52 62.50	12.67 31.25	12.99 31.25	24.90 62.50	11.26 31.25	12.45 31.25	13.10 31.25
	Max. Size of Fuse or Breaker		90	50	50	90	45	45	45
T-1-11683	Load	KVA Amps	30.02 83.33	16.89 41.67	17.32 41.67	33.20 83.33	15.01 41.67	16.60 41.67	17.46 41.67
	Max. Size of Fuse or Breaker		125	70	70	125	60	60	60
T-1-11684	Load	KVA Amps	45.03 125.00	25.33 62.50	25.98 62.50	49.80 125.00	22.52 62.50	24.90 62.50	26.20 62.50
	Max. Size of Fuse or Breaker		175	100	100	175	90	90	90
T-1-11685	Load	KVA Amps	60.04 166.67	33.77 83.33	34.64 83.33	66.40 167.67	30.02 83.33	33.20 83.33	34.93 83.33
	Max. Size of Fuse or Breaker		250	125	125	250	125	125	125
T-1-11686	Load	KVA Amps	90.07 250.00	50.66 125.00	51.96 125.00	99.59 250.00	45.03 125.00	49.80 125.00	52.39 125.00
	Max. Size of Fuse or Breaker		350	200	200	350	175	175	175
T-1-11687	Load	KVA Amps	150.11 416.67	84.44 208.33	86.60 208.33	165.99 416.67	75.06 208.33	82.99 208.33	87.32 208.33
	Max. Size of Fuse or Breaker		600	350	350	600	300	300	300
T-2-11688 ^①	Load	KVA Amps	225.17 625.00	126.66 312.50	129.90 312.50	248.98 625.00	112.58 312.50	124.49 312.50	130.99 312.50
	Max. Size of Fuse or Breaker		1000	500	500	1000	450	450	450
T-2-11689 ^①	Load	KVA Amps	300.22 833.33	168.87 416.67	173.21 416.67	331.98 833.33	150.11 416.67	165.99 416.67	174.65 416.67
	Max. Size of Fuse or Breaker		1200	700	700	1200	600	600	600
Quantity Required			3	3	3	3	2	2	2
See Page 118 For Connection Diagrams			A-A	F-F	F-F	A-A	B-B	B-B	B-B

BUCKING				
219	230	250	255	264
208	208	227	232	240
1.58 4.39	0.83 2.30	0.90 2.29	0.92 2.29	0.95 2.29
10	6	6	6	6
3.16 8.77	1.66 4.61	1.80 4.59	1.84 4.58	1.91 4.58
15	10	10	10	10
4.74 13.16	2.49 6.91	2.71 6.88	2.76 6.87	2.86 6.88
20	15	15	15	15
7.90 21.94	4.15 11.52	4.51 11.47	4.60 11.45	4.76 11.46
30	15	15	15	15
15.80 43.87	8.30 23.04	9.02 22.94	9.20 22.90	9.53 22.92
60	30	30	30	30
23.71 65.81	12.45 34.56	13.53 34.42	13.80 34.35	14.29 34.38
80	40	40	40	40
31.61 87.74	16.60 46.07	18.04 45.89	18.40 45.80	19.05 45.83
110	60	60	60	60
47.41 131.61	24.90 69.11	27.06 68.83	27.60 68.70	28.58 68.75
175	80	80	80	80
63.22 175.48	33.20 92.15	36.08 91.78	36.81 91.59	38.11 91.67
225	110	110	110	110
94.83 263.22	49.80 138.22	54.13 137.67	55.21 137.39	57.16 137.50
350	175	175	175	175
158.05 438.70	82.99 230.37	90.21 229.44	92.02 228.99	95.26 229.17
600	300	300	300	300
237.07 658.05	124.49 345.55	135.32 344.16	138.02 343.48	142.89 343.75
800	400	400	400	400
316.10 877.40	165.99 460.74	180.42 458.88	184.03 457.97	190.53 458.33
1200	600	600	600	600
2	2	2	2	2
C-C	E-E	E-E	E-E	E-E

① See chart on page 117.

NOTE: (1) Inputs and Outputs may be reversed; KVA capacity remains constant. All applications above bold face line are suitable for 50/60 Hz. All applications below bold face line are suitable for 60 Hz only. (2) Connection Diagrams A-A and F-F cannot be reverse connected.

GROUP II



THREE PHASE		BOOSTING				
	Line Voltage (Available)	183Y 106	208Y 120	195	208	225
	Load Voltage (Output)	208	236	208	240	240
CAT. NO.						
T-1-81054	Load KVA	1.13	1.28	1.13	0.63	1.30
	Amps	3.13	3.13	3.13	1.56	3.13
	Max. Size of Fuse or Breaker	6	6	6	3	6
T-1-81055	Load KVA	2.25	2.55	2.25	1.27	2.60
	Amps	6.25	6.25	6.25	3.13	6.25
	Max. Size of Fuse or Breaker	15	15	15	6	15
T-1-81056	Load KVA	3.38	3.83	3.38	1.90	3.90
	Amps	9.38	9.38	9.38	4.69	9.38
	Max. Size of Fuse or Breaker	15	15	15	10	15
T-1-81057	Load KVA	5.63	6.39	5.63	3.17	6.50
	Amps	15.63	15.63	15.63	7.81	15.63
	Max. Size of Fuse or Breaker	25	25	25	15	25
T-1-81058	Load KVA	11.26	12.77	11.26	6.33	12.99
	Amps	31.25	31.25	31.25	15.63	31.25
	Max. Size of Fuse or Breaker	45	45	45	25	45
T-1-81059	Load KVA	16.89	19.16	16.89	9.50	19.49
	Amps	46.88	46.88	46.88	23.44	46.88
	Max. Size of Fuse or Breaker	70	70	70	35	70
T-1-13073	Load KVA	22.52	25.55	22.52	12.67	25.98
	Amps	62.50	62.50	62.50	31.25	62.50
	Max. Size of Fuse or Breaker	90	90	90	45	90
T-1-13074	Load KVA	33.77	38.32	33.77	19.00	38.97
	Amps	93.75	93.75	93.75	46.88	93.75
	Max. Size of Fuse or Breaker	150	150	125	70	125
T-1-13075	Load KVA	45.03	51.10	45.03	25.33	51.96
	Amps	125.00	125.00	125.00	62.50	125.00
	Max. Size of Fuse or Breaker	200	200	175	90	175
T-1-13076	Load KVA	67.55	76.64	67.55	38.00	77.94
	Amps	187.50	187.50	187.50	93.75	187.50
	Max. Size of Fuse or Breaker	300	300	250	150	250
T-1-13077	Load KVA	112.58	127.74	112.58	63.33	129.90
	Amps	312.50	312.50	312.50	156.25	312.50
	Max. Size of Fuse or Breaker	450	450	450	225	450
T-2-13078 ^①	Load KVA	166.87	191.61	168.87	94.99	194.86
	Amps	468.75	468.75	468.75	234.38	468.75
	Max. Size of Fuse or Breaker	700	700	700	350	700
T-2-13079 ^①	Load KVA	225.17	255.48	225.17	126.66	259.81
	Amps	625.00	625.00	625.00	312.50	625.00
	Max. Size of Fuse or Breaker	1000	1000	1000	450	1000
Quantity Required		3	3	2	2	2
See Page 118 For Connection Diagrams		A-A	A-A	G-G	B-B	G-G

BUCKING					
240	245	250	256	265	272
208	230	234	240	234	240
0.56	1.33	1.35	1.39	0.72	0.74
1.56	3.33	3.34	3.33	1.77	1.77
3	6	6	6	3	3
1.13	2.65	2.71	2.77	1.43	1.47
3.13	6.66	6.68	6.67	3.54	3.54
6	15	15	15	6	6
1.69	3.98	4.06	4.16	2.15	2.21
4.69	9.99	10.02	10.00	5.31	5.31
10	15	15	15	10	10
2.81	6.63	6.77	6.93	3.59	3.68
7.81	16.64	16.69	16.67	8.85	8.85
15	20	20	20	15	15
5.63	13.26	13.53	13.86	7.17	7.36
15.63	33.29	33.39	33.33	17.69	17.71
20	40	40	40	20	20
8.44	19.89	20.30	20.78	10.76	11.04
23.44	49.93	50.08	50.00	26.54	26.56
30	60	60	60	30	30
11.26	26.52	27.06	27.71	14.34	14.72
31.25	66.58	66.67	66.67	35.39	35.42
35	80	80	80	40	40
16.89	39.87	40.59	41.57	21.52	22.08
46.88	99.86	100.16	100.00	53.08	53.13
60	125	125	125	60	60
22.52	53.04	54.13	55.43	28.69	29.44
62.50	133.15	133.55	133.33	70.78	70.83
70	175	175	175	80	80
33.77	79.57	81.19	83.14	43.03	44.17
93.75	199.73	200.32	200.00	106.17	106.25
110	250	250	250	125	125
56.29	132.61	135.32	138.56	71.72	73.50
156.25	332.88	333.87	333.33	176.95	176.80
175	400	400	400	200	200
84.44	198.92	202.97	207.85	107.58	110.42
234.38	499.32	500.80	500.00	265.42	265.63
300	600	600	600	300	300
112.58	265.22	270.63	277.13	143.44	147.22
312.50	665.76	667.74	666.67	353.90	354.17
350	800	800	800	400	400
2	2	2	2	2	2
D-D	C-C	C-C	C-C	E-E	E-E

① See chart on page 115.

NOTE: (1) Inputs and Outputs may be reversed; KVA capacity remains constant. All applications above bold face line are suitable for 50/60 Hz. All applications below bold face line are suitable for 60 Hz only. (2) Connection Diagrams A-A and F-F cannot be reverse connected.



GROUP III

THREE PHASE			BOOSTING						
	Line Voltage (Available)	399Y 230	380	430	440	460	460	480	480
	Load Voltage (Output)	480Y 277	420	473	462	506	483	528	504
CAT. NO.									
T-1-81061	Load KVA Amps	0.86 1.04	0.76 1.04	0.85 1.04	1.66 2.08	0.91 1.04	1.74 2.08	0.95 1.04	1.82 2.08
	Max. Size of Fuse or Breaker	3	3	3	6	3	6	3	6
T-1-81062	Load KVA Amps	1.73 2.08	1.51 2.08	1.70 2.08	3.33 4.16	1.82 2.08	3.48 4.16	1.90 2.08	3.63 4.16
	Max. Size of Fuse or Breaker	6	6	6	10	6	10	6	10
T-1-81063	Load KVA Amps	2.60 3.12	2.27 3.12	2.56 3.12	4.99 6.24	2.73 3.12	5.22 6.25	2.85 3.12	5.45 6.24
	Max. Size of Fuse or Breaker	10	6	6	15	6	15	6	15
T-1-81064	Load KVA Amps	4.33 5.20	3.78 5.20	4.26 5.20	8.32 10.40	4.56 5.20	8.70 10.40	4.76 5.20	9.08 10.40
	Max. Size of Fuse or Breaker	15	10	10	15	10	15	10	15
T-1-81065	Load KVA Amps	8.60 10.40	7.56 10.40	8.52 10.40	16.64 20.80	9.11 10.40	17.40 20.80	9.51 10.40	18.16 20.80
	Max. Size of Fuse or Breaker	20	15	15	30	15	30	15	30
T-1-81066	Load KVA Amps	12.90 15.60	11.34 15.60	12.77 15.60	24.97 31.20	13.67 15.60	26.10 31.20	14.27 15.60	27.24 31.20
	Max. Size of Fuse or Breaker	25	25	25	45	25	45	25	45
T-1-37920	Load KVA Amps	17.30 20.80	15.12 20.80	17.03 20.80	33.29 41.60	18.23 20.80	34.80 41.60	19.02 20.80	36.31 41.60
	Max. Size of Fuse or Breaker	35	30	30	60	30	60	30	60
T-1-37921	Load KVA Amps	25.90 31.20	22.69 31.20	25.55 31.20	49.93 62.40	27.34 31.20	52.20 62.40	28.53 31.20	54.47 62.40
	Max. Size of Fuse or Breaker	50	45	45	90	45	90	45	90
T-1-37922	Load KVA Amps	34.60 41.60	30.25 41.60	34.07 41.60	66.58 83.20	36.46 41.60	69.60 83.20	38.04 41.60	72.63 83.20
	Max. Size of Fuse or Breaker	70	60	60	110	60	110	60	110
T-1-37923	Load KVA Amps	52.00 62.50	45.45 62.50	51.18 62.50	100.03 125.00	54.69 62.50	104.57 125.00	57.07 62.50	109.12 125.00
	Max. Size of Fuse or Breaker	100	90	90	175	90	175	90	175
T-1-37924	Load KVA Amps	86.10 104.00	75.62 104.00	85.17 104.00	166.44 208.00	91.15 104.00	174.01 208.00	95.11 104.00	181.57 208.00
	Max. Size of Fuse or Breaker	175	150	150	300	150	300	150	300
T-2-43570	Load KVA Amps	129.30 156.00	113.43 156.00	127.75 156.00	249.66 312.00	136.72 156.00	261.01 312.00	142.67 156.00	272.36 312.00
	Max. Size of Fuse or Breaker	250	225	225	450	225	450	225	450
T-2-43571 ^①	Load KVA Amps	173.10 208.00	151.25 208.00	170.33 208.00	332.89 416.00	182.29 208.00	348.02 416.00	190.22 208.00	363.15 416.00
	Max. Size of Fuse or Breaker	350	300	300	600	300	600	300	600
Quantity Required		3	2	2	2	2	2	2	2
See Page 118 For Connection Diagrams		F-F	B-B	B-B	G-G	B-B	G-G	B-B	G-G

BUCKING							
440	440	460	460	480	480	500	500
400	419	438	418	457	436	455	477
0.79 1.14	1.58 2.18	1.66 2.18	0.83 1.14	1.73 2.18	0.86 1.14	0.90 1.14	1.80 2.18
3	6	6	3	6	3	3	6
1.59 2.29	3.17 4.37	3.31 4.37	1.66 2.29	3.46 4.37	1.73 2.29	1.80 2.29	3.61 4.37
6	10	10	6	10	6	6	10
2.38 3.43	4.75 6.55	4.97 6.55	2.48 3.43	5.19 6.55	2.59 3.43	2.70 3.43	5.41 6.55
6	15	15	6	15	6	6	15
3.96 5.72	7.92 10.92	8.28 10.92	4.14 5.72	8.64 10.92	4.32 5.72	4.51 5.72	9.02 10.92
10	15	15	10	15	10	10	15
7.93 11.44	15.85 21.84	16.57 21.84	8.28 11.44	17.29 21.84	8.64 11.44	9.02 11.44	18.04 21.84
15	30	30	15	30	15	15	30
11.89 17.16	23.77 32.76	24.85 32.76	12.42 17.16	25.93 32.76	12.96 17.16	13.52 17.16	27.07 32.76
20	40	40	20	40	20	20	40
15.85 22.88	31.70 43.68	33.14 43.68	16.57 22.88	34.57 43.68	17.28 22.88	18.03 22.88	36.09 43.68
30	60	60	30	60	30	30	60
23.78 34.32	47.55 65.52	49.71 65.52	24.85 34.32	51.86 65.52	25.92 34.32	27.05 34.32	54.13 65.52
40	80	80	40	80	40	40	80
31.70 45.76	63.40 87.36	66.27 87.36	33.13 45.76	69.15 87.36	34.56 45.76	36.06 45.76	72.18 87.36
60	110	110	60	110	60	60	110
47.63 68.75	95.25 131.25	99.57 131.25	49.77 68.75	103.89 131.25	51.92 68.75	54.18 68.75	108.44 131.25
80	175	175	80	175	80	80	175
79.26 114.40	158.50 218.40	165.69 218.40	82.83 114.40	172.87 218.40	86.39 114.40	90.16 114.40	180.44 218.40
150	300	300	150	300	150	150	300
118.89 171.60	237.75 327.60	248.53 327.60	124.24 171.60	259.31 327.60	129.59 171.60	135.23 171.60	270.66 327.60
200	400	400	200	400	200	200	400
158.52 228.80	317.00 436.80	331.37 436.80	165.65 228.80	345.75 436.80	172.78 228.80	180.31 228.80	360.88 436.80
300	600	600	300	600	300	300	600
2	2	2	2	2	2	2	2
E-E	C-C	C-C	E-E	C-C	E-E	E-E	C-C

① See chart on page 115.

NOTE: (1) Inputs and Outputs may be reversed; KVA capacity remains constant. All applications above bold face line are suitable for 50/60 Hz. All applications below bold face line are suitable for 60 Hz only. (2) Connection Diagrams A-A and F-F cannot be reverse connected.

SPECIFICATIONS ①

GROUP I



CATALOG NUMBER	INSULATING TRANSFORMER RATING	SECONDARY MAXIMUM CURRENT OUTPUT		APPROX. DIMENSIONS INCHES (CM.)			APPROX. NET WEIGHT LBS. (KG.)	DIMENSIONAL DRAWINGS
		12 V	24 V	HEIGHT	WIDTH	DEPTH		
		PRIM R OLTS		S ON R OLTS		H		
T-1-81047	0.05 KVA	4.16	2.08	6.41 (16.3)	3.14 (8.0)	3.05 (7.7)	4 (1.8)	A
T-1-81048	0.10 KVA	8.32	4.16	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	5 (2.3)	A
T-1-81049	0.15 KVA	12.52	6.25	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	7 (3.2)	A
T-1-81050	0.25 KVA	20.80	10.40	8.68 (22.0)	4.08 (10.4)	3.88 (9.9)	10 (4.5)	B
T-1-81051	0.50 KVA	41.60	20.80	9.06 (23.0)	4.37 (11.1)	4.20 (10.7)	15 (6.8)	B
T-1-81052	0.75 KVA	62.50	31.25	9.68 (24.6)	4.75 (12.1)	4.51 (11.5)	19 (8.6)	B
T-1-11683	1.00 KVA	83.20	41.60	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	B
T-1-11684	1.50 KVA	125.00	62.50	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	B
T-1-11685	2.00 KVA	166.00	83.20	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	B
T-1-11686	3.00 KVA	250.00	125.00	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	C
T-1-11687	5.00 KVA	416.60	208.00	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	C
T-2-11688	7.50 KVA	625.00	312.50	20.81 (52.9)	11.12 (28.2)	10.84 (27.5)	125 (56.7)	D
T-2-11689	10.00 KVA	833.00	416.60	20.81 (52.9)	11.75 (29.8)	11.59 (29.4)	160 (72.6)	D

GROUP II

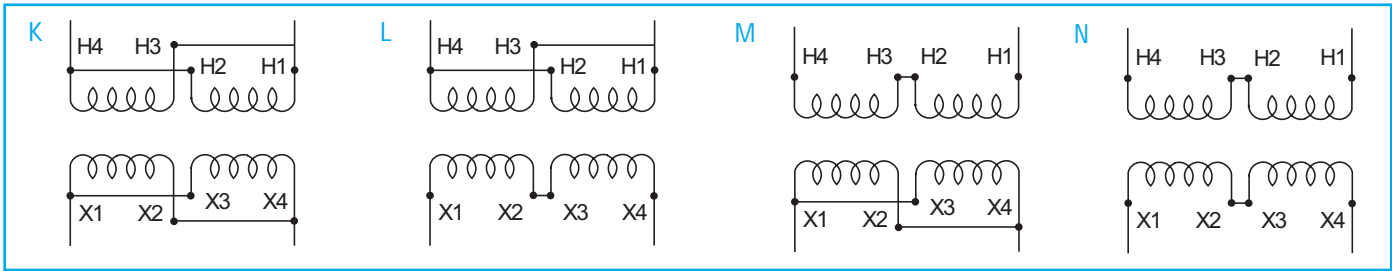
CATALOG NUMBER	INSULATING TRANSFORMER RATING	SECONDARY MAXIMUM CURRENT OUTPUT		APPROX. DIMENSIONS INCHES (CM.)			APPROX. NET WEIGHT LBS. (KG.)	DIMENSIONAL DRAWINGS
		16 V	32 V	HEIGHT	WIDTH	DEPTH		
		PRIM R OLTS		S ON R OLTS		H		
T-1-81054	0.05 KVA	3.12	1.56	6.41 (16.3)	3.14 (8.0)	3.05 (7.7)	4 (1.8)	A
T-1-81055	0.10 KVA	6.25	3.12	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	5 (2.3)	A
T-1-81056	0.15 KVA	9.38	4.69	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	7 (3.2)	A
T-1-81057	0.25 KVA	15.60	7.80	8.68 (22.0)	4.08 (10.4)	3.88 (9.9)	10 (4.5)	B
T-1-81058	0.50 KVA	31.20	15.60	9.06 (23.0)	4.37 (11.1)	4.20 (10.7)	15 (6.8)	B
T-1-81059	0.75 KVA	46.90	23.40	9.68 (24.6)	4.75 (12.1)	4.51 (11.5)	19 (8.6)	B
T-1-13073	1.00 KVA	62.50	31.20	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	B
T-1-13074	1.50 KVA	93.70	46.90	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	B
T-1-13075	2.00 KVA	125.00	62.50	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	B
T-1-13076	3.00 KVA	187.50	93.80	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	C
T-1-13077	5.00 KVA	312.00	156.00	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	C
T-2-13078	7.50 KVA	468.00	234.00	20.81 (52.9)	11.12 (28.2)	10.84 (27.5)	125 (56.7)	D
T-2-13079	10.00 KVA	625.00	312.00	20.81 (52.9)	11.75 (29.8)	10.84 (27.5)	160 (72.6)	D

GROUP III

CATALOG NUMBER	INSULATING TRANSFORMER RATING	SECONDARY MAXIMUM CURRENT OUTPUT		APPROX. DIMENSIONS INCHES (CM.)			APPROX. NET WEIGHT LBS. (KG.)	DIMENSIONAL DRAWINGS
		24 V	48 V	HEIGHT	WIDTH	DEPTH		
		PRIM R OLTS		S ON R OLTS		H		
T-1-81061	0.05 KVA	2.08	1.04	6.41 (16.3)	3.14 (8.0)	3.05 (7.7)	4 (1.8)	A
T-1-81062	0.10 KVA	4.16	2.08	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	5 (2.3)	A
T-1-81063	0.15 KVA	6.24	3.12	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	7 (3.2)	A
T-1-81064	0.25 KVA	10.40	5.20	8.68 (22.0)	4.08 (10.4)	3.88 (9.9)	10 (4.5)	B
T-1-81065	0.50 KVA	20.80	10.40	9.06 (23.0)	4.37 (11.1)	4.20 (10.7)	15 (6.8)	B
T-1-81066	0.75 KVA	31.20	15.60	9.68 (24.6)	4.75 (12.1)	4.51 (11.5)	19 (8.6)	B
T-1-37920	1.00 KVA	41.60	20.80	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	B
T-1-37921	1.50 KVA	62.40	31.20	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	B
T-1-37922	2.00 KVA	83.20	41.60	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	B
T-1-37923	3.00 KVA	125.00	62.50	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	C
T-1-37924	5.00 KVA	208.00	104.00	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	C
T-2-43570	7.50 KVA	312.00	156.00	20.81 (52.9)	11.12 (28.2)	10.84 (27.5)	135 (61.2)	D
T-2-43571	10.00 KVA	416.00	208.00	20.81 (52.9)	11.75 (29.8)	11.59 (29.4)	160 (72.6)	D

① All units have ground studs for use with non-metallic conduit. All sizes of 0.75 KVA and less are suitable for 50/60 Hertz. Additional field wiring box may be required when using units as autotransformers.

LOW VOLTAGE LIGHTING CIRCUIT DIAGRAMS SINGLE PHASE



GROUP I

Units Rated 120 x 240 V Input: 12/24 V Output		
INPUT	OUTPUT	CONNECTION DIAGRAM
120	12	K
120	24	L
240	12	M
240	24	N

GROUP II

Units Rated 120 x 240 V Input: 16/32 V Output		
INPUT	OUTPUT	CONNECTION DIAGRAM
120	16	K
120	32	L
240	16	M
240	32	N

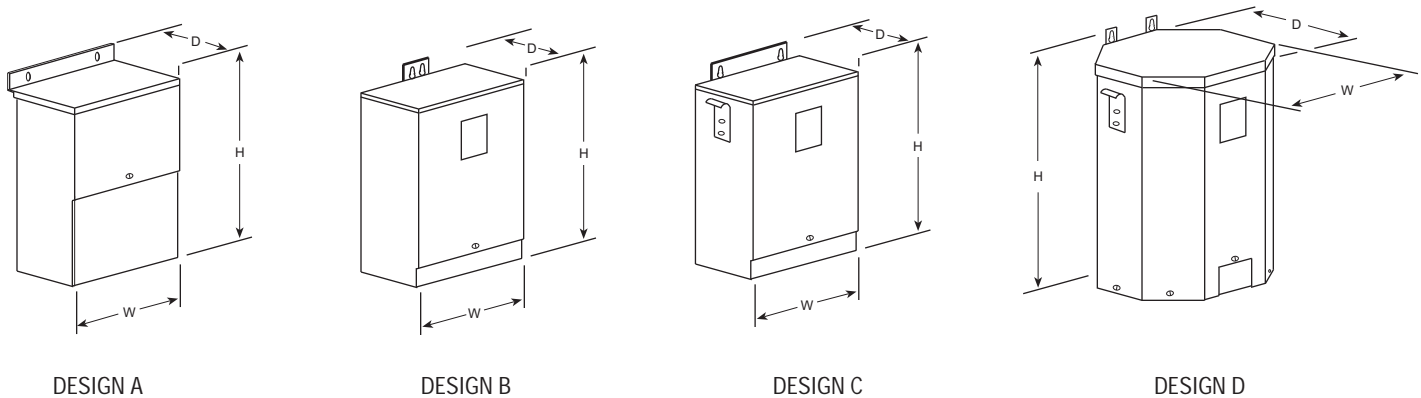
GROUP III

Units Rated 240 x 480 V Input: 24/48 V Output		
INPUT	OUTPUT	CONNECTION DIAGRAM
240	24	K
240	48	L
480	24	M
480	48	N

	Number of Leads per Termination							
	H1	H2	H3	H4	X1	X2	X3	X4
T-2-13078	1	1	1	1	2	2	2	2
T-2-13079	1	1	1	1	2	2	2	2
T-2-43571	1	1	1	1	2	2	2	2
T-2-11688	1	1	1	1	2	2	2	2
T-2-11689	1	1	1	1	2	2	2	2

All leads with same designation (ex. X1, X1) MUST be joined together for proper operation.

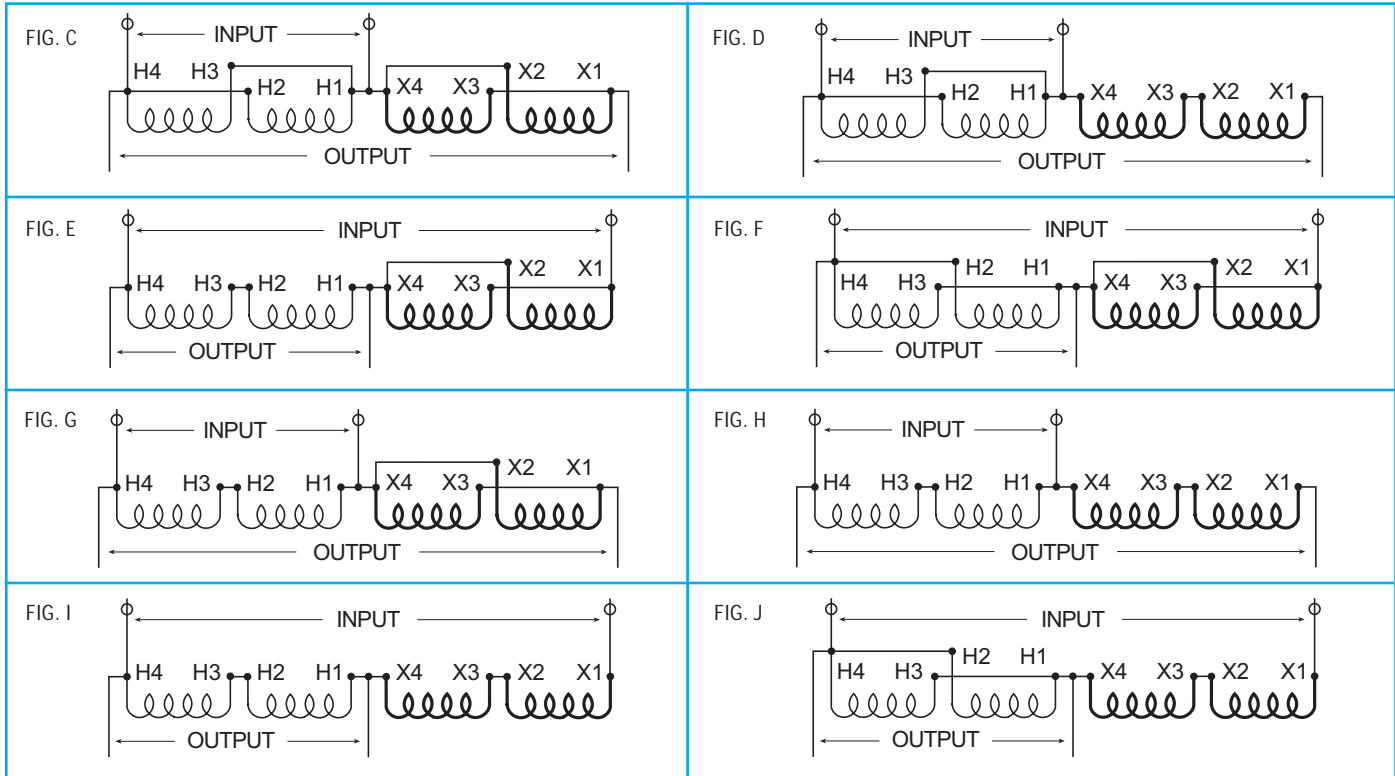
BUCK-BOOST DIMENSIONAL DRAWINGS



NOTE: All designs listed above are totally enclosed and suitable for UL 3R outdoor service.

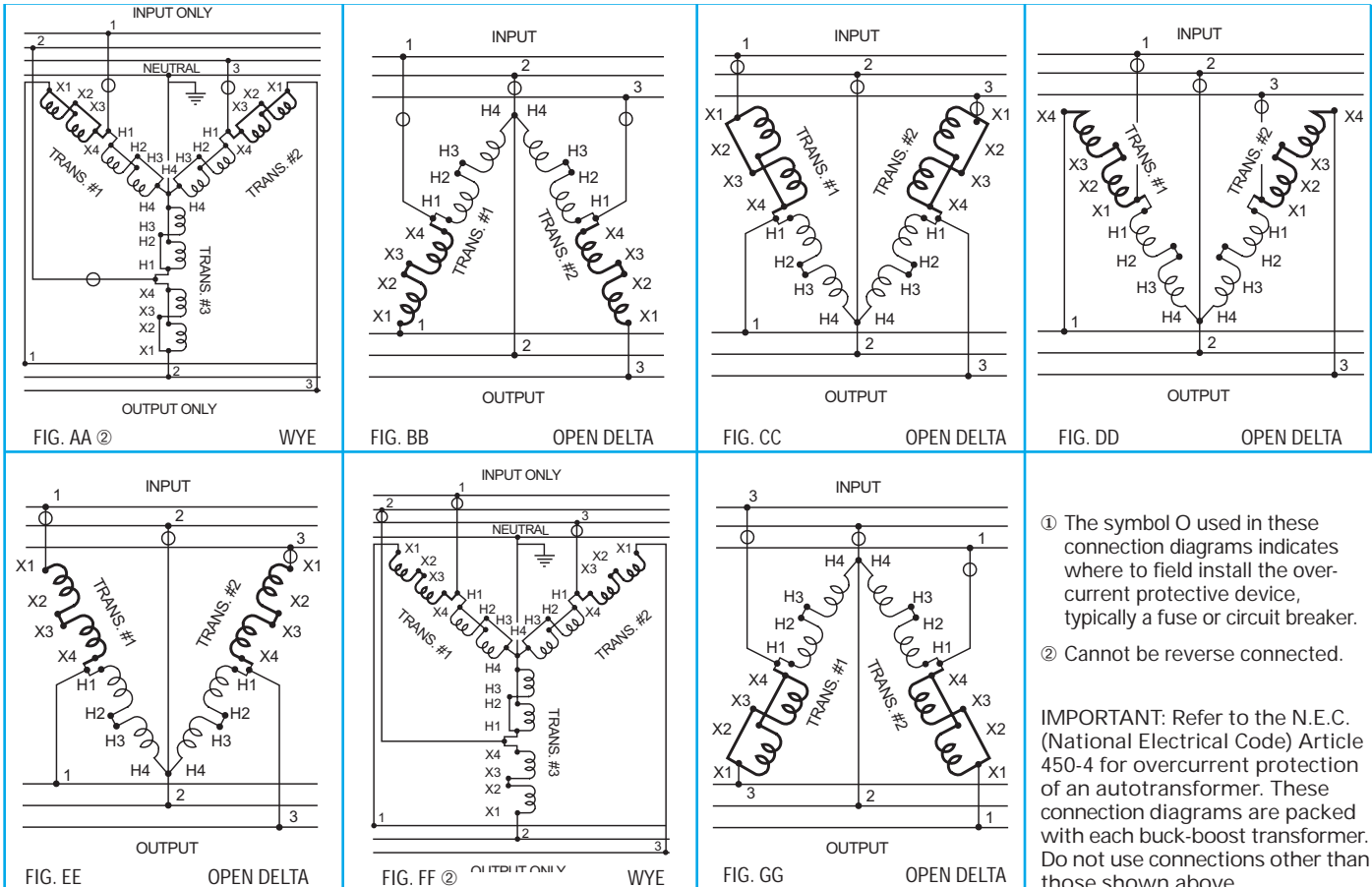
BUCK-BOOST WIRING DIAGRAMS ①

SINGLE PHASE



BUCK-BOOST WIRING DIAGRAMS ①

THREE PHASE



① The symbol O used in these connection diagrams indicates where to field install the overcurrent protective device, typically a fuse or circuit breaker.

② Cannot be reverse connected.

IMPORTANT: Refer to the N.E.C. (National Electrical Code) Article 450-4 for overcurrent protection of an autotransformer. These connection diagrams are packed with each buck-boost transformer. Do not use connections other than those shown above.