SELECTING A BUCK-BOOST TRANSFORMER

You should have the following information before selecting a buck-boost transformer.

Line Voltage — The voltage that you want to buck (decrease) or boost (increase). This can be found by measuring the supply line voltage with a voltmeter.

Load Voltage — The voltage at which your equipment is designed to operate. This is listed on the nameplate of the load equipment.

Load kVA or Load Amps — You do not need to know both — one or the other is sufficient for selection purposes. This information usually can be found on the nameplate of the equipment that you want to operate.

Frequency — The supply line frequency must be the same as the frequency of the equipment to be operated — either 50 or 60 cycles.

Phase — The supply line should be the same as the equipment to be operated — either single or three phase.

Four Step Selection

1. A series of LINE VOLTAGE and LOAD VOLTAGE combinations are listed across the top of each selection chart. Select a LINE VOLTAGE and LOAD VOLTAGE combination from ANY of the charts that comes closest to matching the LINE VOLTAGE and LOAD VOLTAGE of your application.

2. Read down the column you have selected until you reach either the LOAD kVA or LOAD AMPS of the equipment you want to operate. You probably will not find the exact value of LOAD kVA or LOAD AMPS so go to the next higher rating.

3. From this point, read across the column to the far left-hand side and you have found the catalog number of the exact buck-boost transformer you need. Refer to the catalog number listing on page 133 and 135 for dimensions.

4. CONNECT the transformer according to the connection diagram specified at the bottom of the column where you selected YOUR LINE VOLTAGE and LOAD VOLTAGE combination. Connection diagrams are found at the end of this section.

This same connection information is packed with each buck-boost transformer.

Single Phase Application			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**
Catalog Number																
T181047	Load	kVA	0.24	0.25	0.48	0.50	0.43	0.48	0.49	0.50	0.52	0.54	0.47	0.50	0.52	1.02
		Amps	2.08	2.08	4.17	4.17	2.08	2.08	2.08	2.08	4.60	4.60	2.28	2.28	2.28	4.37
		Maximum Size of Fuse or Breaker	6	6	10	10	6	6	6	6	10	10	6	6	6	10
T181048	Load	kVA	0.47	0.50	0.96	1.01	0.87	0.96	0.99	1.01	1.04	1.08	0.95	1.00	1.04	2.04
		Amps	4.17	4.17	8.33	8.33	4.17	4.17	4.17	4.17	9.20	9.20	4.56	4.56	4.58	8.75
		Maximum Size of Fuse or Breaker	10	10	15	15	10	10	10	10	15	15	10	10	10	15
T181049	Load	kVA	0.71	0.75	1.43	1.51	1.30	1.43	1.48	1.51	1.56	1.62	1.42	1.50	1.56	3.00
		Amps	6.25	6.25	12.50	12.50	6.25	6.25	6.25	6.25	13.80	13.80	6.86	6.86	6.86	13.10
		Maximum Size of Fuse or Breaker	15	15	20	20	15	15	15	15	20	20	15	15	15	15
T181050	Load	kVA	1.19	1.25	2.40	2.50	2.16	2.39	2.46	2.52	2.60	2.75	2.37	2.50	2.60	5.10
		Amps	10.42	10.40	20.80	20.80	10.40	10.40	10.40	10.40	22.80	22.80	11.40	11.40	11.40	21.80
		Maximum Size of Fuse or Breaker	25	25	40	30	15	15	15	15	30	30	15	15	15	30
T181051	Load	kVA	2.37	2.50	4.80	5.00	4.33	4.79	4.93	5.04	5.20	5.40	4.47	5.00	5.20	10.20
		Amps	20.83	20.83	41.67	41.67	20.83	20.83	20.83	20.83	46.80	46.80	22.80	22.80	22.80	43.70
		Maximum Size of Fuse or Breaker	35	35	60	60	30	30	30	30	60	60	30	30	30	60
T181052	Load	kVA	3.56	3.75	7.17	7.56	6.50	7.19	7.41	7.56	7.80	8.15	7.10	7.50	7.80	15.30
		Amps	31.25	31.25	62.50	62.50	31.25	31.25	31.25	31.25	68.50	69.50	34.40	34.40	34.40	65.50
		Maximum Size of Fuse or Breaker	50	50	90	90	45	45	45	45	80	80	40	40	40	80
T111683	Load	kVA	4.75	5.00	9.58	10.00	8.66	9.58	9.87	10.00	10.40	10.80	9.50	10.00	10.00	20.40
		Amps	41.67	41.67	83.31	83.31	41.67	41.67	41.67	41.67	91.50	91.50	45.80	45.80	45.80	87.50
		Maximum Size of Fuse or Breaker	70	70	125	125	60	60	60	60	110	110	60	60	50	110
T111684	Load	kVA	7.12	7.50	14.40	15.10	13.00	14.30	14.80	15.10	15.00	16.20	14.24	15.00	15.60	30.60
		Amps	62.50	62.50	125.00	125.00	62.50	62.50	62.50	62.50	138.00	138.00	68.60	68.60	68.60	132.00
		Maximum Size of Fuse or Breaker	100	100	175	175	90	90	90	90	150	175	80	80	80	175
T111685	Load	kVA	9.50	10.00	19.20	20.20	17.30	19.16	19.70	20.10	20.80	21.60	19.00	20.00	20.30	40.80
		Amps	83.30	83.30	166.60	166.60	83.30	83.30	83.30	83.30	183.00	183.00	91.60	91.60	91.20	175.00
		Maximum Size of Fuse or Breaker	125	125	250	250	125	125	125	125	225	225	110	110	110	225
T111686	Load	kVA	14.20	15.00	28.80	30.00	26.00	28.70	29.60	30.30	31.20	32.50	28.50	30.00	31.20	61.00
		Amps	125.00	125.00	250.00	250.00	125.00	125.00	125.00	125.00	275.00	275.00	136.80	136.80	136.80	263.00
		Maximum Size of Fuse or Breaker	200	200	350	350	175	175	175	175	350	350	175	175	175	350
T111687	Load	kVA	23.70	25.00	47.90	50.00	43.30	47.80	49.30	50.30	52.00	54.00	47.40	50.00	52.00	102.00
		Amps	208.00	208.00	416.60	416.60	208.00	208.00	208.00	208.00	457.00	457.00	228.00	228.00	228.00	437.00
		Maximum Size of Fuse or Breaker	350	350	600	600	300	300	300	300	600	600	300	300	300	600
T111688 ①	Load	kVA	35.60	37.50	71.90	75.60	65.00	71.80	74.00	75.60	78.00	81.00	71.00	76.00	78.00	153.00
		Amps	312.50	312.50	625.00	625.00	312.50	312.50	312.50	312.50	688.00	688.00	344.00	344.00	344.00	655.00
		Maximum Size of Fuse or Breaker	500	500	1000	1000	450	450	450	450	800	800	400	400	400	800
T111689 ①	Load	kVA	47.50	50.00	95.80	100.00	86.60	95.80	98.70	101.00	104.00	108.00	95.00	100.00	104.00	204.00
		Amps	416.60	416.60	833.30	833.30	416.60	416.60	416.60	416.60	915.00	915.00	458.00	458.00	458.00	875.00
		Maximum Size of Fuse or Breaker	700	700	1200	1200	600	600	600	600	1200	1200	600	600	600	1200
See Page 135 for Connection Diagrams			**D**	**D**	**C**	**C**	**H**	**H**	**H**	**H**	**F**	**F**	**I**	**I**	**I**	**E**

① See chart on page 134, 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 134.

Single Phase Application			Boosting								Bucking					
Line Voltage (Available)			**95**	**100**	**105**	**208**	**215**	**215**	**220**	**225**	**135**	**240**	**240**	**245**	**250**	**255**
Load Voltage (Output)			**120**	**114**	**119**	**240**	**244**	**230**	**235**	**240**	**119**	**208**	**225**	**230**	**234**	**239**
Catalog Number																
T181054	Load	kVA	0.19	0.36	0.37	0.38	0.38	0.72	0.73	0.75	0.42	0.37	0.75	0.77	0.78	0.80
		Amps	1.56	3.13	3.13	1.56	1.56	3.13	3.13	3.13	3.54	1.77	3.33	3.33	3.33	3.33
		Maximum Size of Fuse or Breaker	6	6	6	6	6	6	6	6	6	3	6	6	6	6
T181055	Load	kVA	0.38	0.71	0.74	0.75	0.76	1.44	1.47	1.50	0.84	0.74	1.50	1.53	1.56	1.59
		Amps	3.13	6.25	6.25	3.13	3.13	6.25	6.25	6.25	7.08	3.54	6.67	6.67	6.67	6.67
		Maximum Size of Fuse or Breaker	10	15	6	6	15	15	15	15	15	6	15	15	15	15
T181056	Load	kVA	0.56	1.07	1.12	1.13	1.14	2.16	2.20	2.25	1.26	1.11	2.25	2.30	2.34	2.39
		Amps	4.69	9.38	9.38	4.69	4.69	9.38	9.38	9.38	10.63	5.31	10.00	10.00	10.00	10.00
		Maximum Size of Fuse or Breaker	10	15	15	10	10	15	15	15	15	6	15	15	15	15
T181057	Load	kVA	0.94	1.78	1.86	1.88	1.91	3.59	3.67	3.75	2.11	1.84	3.75	3.83	3.90	3.98
		Amps	7.81	15.63	15.63	7.81	7.81	15.63	15.63	15.63	17.71	8.85	16.67	16.67	16.67	16.67
		Maximum Size of Fuse or Breaker	15	25	25	15	15	25	25	25	20	15	20	20	20	20
T181058	Load	kVA	1.88	3.56	3.72	3.75	3.81	7.19	7.34	7.50	4.21	3.68	7.50	7.67	7.80	7.97
		Amps	15.63	31.25	31.25	15.63	15.63	31.25	31.25	31.25	35.42	17.71	33.33	33.33	33.33	33.33
		Maximum Size of Fuse or Breaker	25	45	45	25	25	45	45	45	40	20	40	40	40	40
T181059	Load	kVA	2.81	5.34	5.58	5.63	5.72	10.78	11.02	11.25	6.32	5.53	11.25	11.50	11.70	11.95
		Amps	23.44	46.88	46.88	23.44	23.44	46.88	46.88	46.88	53.13	26.56	50.00	50.00	50.00	50.00
		Maximum Size of Fuse or Breaker	40	70	70	40	40	70	70	70	60	30	60	60	60	60
T113073	Load	kVA	3.75	7.13	7.44	7.50	7.63	14.38	14.69	15.00	8.43	7.37	15.00	15.33	15.60	15.93
		Amps	31.25	62.50	62.50	31.25	31.25	62.50	62.50	62.50	70.83	35.42	66.67	66.67	66.67	66.67
		Maximum Size of Fuse or Breaker	50	90	90	50	50	90	90	90	80	40	80	80	80	80
T113074	Load	kVA	5.63	10.69	11.16	11.25	11.44	21.56	22.03	22.50	12.64	11.05	22.50	23.00	23.40	23.90
		Amps	46.90	93.80	93.80	46.90	46.90	93.80	93.80	93.80	106.30	53.10	100.00	100.00	100.00	100.00
		Maximum Size of Fuse or Breaker	80	150	150	70	70	125	125	125	125	60	125	125	125	125
T113075	Load	kVA	7.50	14.25	14.88	15.00	15.25	28.75	29.38	30.00	16.86	14.73	30.00	30.67	31.20	31.87
		Amps	62.50	125.00	125.00	62.50	62.50	125.00	125.00	125.00	141.70	70.80	133.30	133.30	133.30	133.30
		Maximum Size of Fuse or Breaker	100	200	200	90	90	175	175	175	175	80	175	175	175	175
T113076	Load	kVA	11.25	21.38	22.31	22.50	22.88	43.13	44.06	45.00	25.29	22.10	45.00	46.00	46.80	47.80
		Amps	93.80	187.50	187.50	93.80	93.80	187.50	187.50	187.50	212.50	106.30	200.00	200.00	200.00	200.00
		Maximum Size of Fuse or Breaker	150	300	300	150	150	250	250	250	250	125	250	250	250	250
T113077	Load	kVA	18.75	35.63	37.19	37.50	38.13	71.88	73.44	75.00	42.15	36.83	75.00	76.67	78.00	79.67
		Amps	156.30	312.50	312.50	156.30	156.30	312.50	312.50	312.50	354.20	177.10	333.30	333.30	333.30	333.30
		Maximum Size of Fuse or Breaker	250	450	450	225	225	450	450	450	400	200	400	400	400	400
T213078 ①	Load	kVA	28.10	53.40	55.80	56.30	57.20	107.80	110.20	112.50	63.20	55.30	112.50	115.00	117.00	119.50
		Amps	234.40	468.80	468.80	234.40	234.40	468.80	468.80	468.80	531.30	265.60	500.00	500.00	500.00	500.00
		Maximum Size of Fuse or Breaker	400	700	700	350	350	700	700	700	600	300	600	600	600	600
T213079 ①	Load	kVA	37.50	71.30	74.40	75.00	76.30	143.80	146.90	150.00	84.30	73.70	150.00	153.30	156.00	159.30
		Amps	312.50	625.00	625.00	312.50	312.50	625.00	625.00	625.00	708.30	354.20	666.70	666.70	666.70	666.70
		Maximum Size of Fuse or Breaker	500	1000	1000	450	450	1000	1000	1000	800	400	800	800	800	800
See Page 135 for Connection Diagrams			**D**	**C**	**C**	**H**	**H**	**G**	**G**	**G**	**F**	**I**	**E**	**E**	**E**	**E**

① See chart on page 134, 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 134.

Single Phase Application			Boosting										Bucking			
Line Voltage (Available)			**230**	**380**	**416**	**425**	**430**	**435**	**440**	**440**	**450**	**460**	**277**	**480**	**480**	**504**
Load Voltage (Output)			**277**	**420**	**457**	**467**	**473**	**457**	**462**	**484**	**472**	**483**	**230**	**436**	**456**	**480**
Catalog Number																
T181061	Load	kVA	0.29	0.44	0.48	0.49	0.49	0.95	0.96	0.50	0.98	1.01	0.29	0.50	1.05	1.10
		Amps	1.04	1.04	1.04	1.04	1.04	2.08	2.08	1.04	2.08	2.08	1.25	1.15	2.29	2.29
		Maximum Size of Fuse or Breaker	3	3	3	3	3	6	6	3	6	6	3	3	6	6
T181062	Load	kVA	0.58	0.87	0.95	0.97	0.99	1.90	1.93	1.01	1.97	2.01	0.58	1.00	2.09	2.20
		Amps	2.08	2.08	2.08	2.08	2.08	4.17	4.17	2.08	4.17	4.17	2.50	2.29	4.58	4.58
		Maximum Size of Fuse or Breaker	6	6	6	6	6	10	10	6	10	10	6	6	10	10
T181063	Load	kVA	0.87	1.31	1.43	1.46	1.48	2.86	2.89	1.51	2.95	3.02	0.86	1.50	3.14	3.30
		Amps	3.13	3.13	3.13	3.13	3.13	6.25	6.25	3.13	6.25	6.25	3.75	3.44	6.88	6.88
		Maximum Size of Fuse or Breaker	10	6	6	6	6	15	15	6	15	15	6	6	15	15
T181064	Load	kVA	1.44	2.19	2.38	2.43	2.46	4.76	4.81	2.52	4.92	5.03	1.44	2.50	5.23	5.50
		Amps	5.21	5.21	5.21	5.21	5.21	5.21	10.42	5.21	10.42	10.42	6.25	5.73	11.46	11.46
		Maximum Size of Fuse or Breaker	15	10	10	10	10	15	15	10	15	15	10	10	15	15
T181065	Load	kVA	2.89	4.38	4.76	4.86	4.93	9.52	9.62	5.04	9.83	10.06	2.88	5.00	10.45	11.00
		Amps	10.42	10.42	10.42	10.42	10.42	20.83	20.83	10.42	20.83	20.83	12.50	11.46	22.92	22.92
		Maximum Size of Fuse or Breaker	20	15	15	15	15	30	30	15	30	30	15	15	30	30
T181066	Load	kVA	4.33	6.56	7.14	7.30	7.39	14.28	14.44	7.56	14.75	15.09	4.31	7.49	15.68	16.50
		Amps	15.63	15.63	15.63	15.63	15.63	31.25	31.25	15.63	31.25	31.25	18.75	17.19	34.38	34.38
		Maximum Size of Fuse or Breaker	25	25	25	25	25	45	45	25	45	45	20	20	45	45
T137920	Load	kVA	5.77	8.57	9.52	9.73	9.85	19.04	19.25	10.08	19.67	20.13	5.75	9.99	20.90	22.00
		Amps	20.83	20.83	20.83	20.83	20.83	41.67	41.67	20.83	41.67	41.67	25.00	22.92	45.83	45.83
		Maximum Size of Fuse or Breaker	35	30	30	30	30	60	60	30	60	60	30	30	60	60
T137921	Load	kVA	8.66	13.13	14.28	14.59	14.78	28.56	28.88	15.13	29.50	30.19	8.63	14.99	31.35	33.00
		Amps	31.25	31.25	31.25	31.25	31.25	62.50	62.50	31.25	62.50	62.50	37.50	34.38	68.75	68.75
		Maximum Size of Fuse or Breaker	50	50	45	45	45	90	90	45	90	90	40	40	90	90
T137922	Load	kVA	11.54	17.50	19.04	19.46	19.71	38.08	38.50	20.17	39.33	40.25	11.50	19.98	41.80	44.00
		Amps	41.67	41.67	41.67	41.67	41.67	83.33	83.33	41.67	83.33	83.33	50.00	45.83	91.67	91.67
		Maximum Size of Fuse or Breaker	70	60	60	60	60	110	110	60	110	110	60	60	110	110
T137923	Load	kVA	17.31	26.25	28.56	29.19	29.56	57.13	57.75	30.25	59.00	60.38	17.25	29.98	62.70	66.00
		Amps	62.50	62.50	62.50	62.50	62.50	125.00	125.00	62.50	125.00	125.00	75.00	68.80	137.50	137.50
		Maximum Size of Fuse or Breaker	100	90	90	90	90	175	175	90	175	175	80	80	175	175
T137924	Load	kVA	28.90	43.80	47.60	48.60	49.30	95.20	96.20	50.40	98.30	100.60	28.80	50.00	104.50	110.00
		Amps	104.20	104.20	104.20	104.20	104.20	208.30	208.30	104.20	208.30	208.30	125.00	114.60	229.20	229.20
		Maximum Size of Fuse or Breaker	175	150	150	150	150	300	300	150	300	300	150	150	300	300
T243570①	Load	kVA	43.30	65.60	71.40	73.00	73.90	142.80	144.40	75.60	147.50	150.90	43.10	74.90	156.80	165.00
		Amps	156.30	156.30	156.30	156.30	156.30	312.50	312.50	156.30	312.50	312.50	187.50	171.90	343.80	343.80
		Maximum Size of Fuse or Breaker	250	225	225	225	225	450	450	225	450	450	200	200	450	450
T243571①	Load	kVA	57.70	87.50	95.20	97.30	98.50	190.40	192.50	100.80	196.70	201.30	57.50	99.90	209.00	220.00
		Amps	208.30	208.30	208.30	208.30	208.30	416.70	416.70	208.30	416.70	416.70	250.00	229.20	458.30	458.30
		Maximum Size of Fuse or Breaker	350	300	300	300	300	600	600	300	600	600	300	300	600	600
See Page 135 for Connection Diagrams			**D**	**H**	**H**	**H**	**H**	**G**	**G**	**H**	**G**	**G**	**J**	**I**	**E**	**E**

① See chart on page 134, 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 134.

Three Phase Application			Boosting							Bucking				
Line Voltage (Available)			**189Y 109**	**196Y 113**	**201Y 116**	**208Y 120**	**189**	**208**	**220**	**219**	**230**	**250**	**255**	**264**
Load Voltage (Output)			**208**	**234**	**240**	**230**	**208**	**230**	**242**	**208**	**208**	**227**	**232**	**240**
Catalog Number														
T181047	Load	kVA	1.50	0.84	0.87	1.66	0.75	0.83	0.87	1.58	0.83	0.90	0.92	0.95
		Amps	4.17	2.08	2.08	4.17	2.08	2.08	2.08	4.39	2.30	2.29	2.29	2.29
		Maximum Size of Fuse or Breaker	10	6	6	10	6	6	6	10	6	6	6	6
T181048	Load	kVA	3.00	1.69	1.73	3.32	1.50	1.66	1.75	3.16	1.66	1.80	1.84	1.91
		Amps	8.33	4.17	4.17	8.33	4.17	4.17	4.17	8.77	4.61	4.59	4.58	4.58
		Maximum Size of Fuse or Breaker	15	10	10	15	10	10	10	15	10	10	10	10
T181049	Load	kVA	4.50	2.53	2.60	4.98	2.25	2.49	2.62	4.74	2.49	2.71	2.76	2.86
		Amps	12.50	6.25	6.25	12.50	6.25	6.25	6.25	13.16	6.91	6.88	6.87	6.88
		Maximum Size of Fuse or Breaker	20	15	15	20	15	15	15	20	15	15	15	15
T181050	Load	kVA	7.51	4.22	4.33	8.30	3.75	4.15	4.37	7.90	4.15	4.51	4.60	4.76
		Amps	20.83	10.42	10.42	20.83	10.42	10.42	10.42	21.94	11.52	11.47	11.45	11.46
		Maximum Size of Fuse or Breaker	30	20	20	30	15	15	15	30	15	15	15	15
T181051	Load	kVA	15.01	8.44	8.66	16.60	7.51	8.30	8.73	15.80	8.30	9.02	9.20	9.53
		Amps	41.67	20.83	20.83	41.67	20.83	20.83	20.83	43.87	23.04	22.94	22.90	22.92
		Maximum Size of Fuse or Breaker	60	35	35	60	30	30	30	60	30	30	30	30
T181052	Load	kVA	22.52	12.67	12.99	24.90	11.26	12.45	13.10	23.71	12.45	13.53	13.80	14.29
		Amps	62.50	31.25	31.25	62.50	31.25	31.25	31.25	65.81	34.56	34.42	34.35	34.38
		Maximum Size of Fuse or Breaker	90	50	50	90	45	45	45	80	40	40	40	40
T111683	Load	kVA	30.02	16.89	17.32	33.20	15.01	16.60	17.46	31.61	16.60	18.04	18.40	19.05
		Amps	83.33	41.67	41.67	83.33	41.67	41.67	41.67	87.74	46.07	45.89	45.80	45.83
		Maximum Size of Fuse or Breaker	125	70	70	125	60	60	60	110	60	60	60	60
T111684	Load	kVA	45.03	25.33	25.98	49.80	22.52	24.90	26.20	47.41	24.90	27.06	27.60	28.58
		Amps	125.00	62.50	62.50	125.00	62.50	62.50	62.50	131.61	69.11	68.83	68.70	68.75
		Maximum Size of Fuse or Breaker	175	100	100	175	90	90	90	175	80	80	80	80
T111685	Load	kVA	60.04	33.77	34.64	66.40	30.02	33.20	34.93	63.22	33.20	36.08	36.81	38.11
		Amps	166.67	83.33	83.33	167.67	83.33	83.33	83.33	175.48	92.15	91.78	91.59	91.67
		Maximum Size of Fuse or Breaker	250	125	125	250	125	125	125	225	110	110	110	110
T111686	Load	kVA	90.07	50.66	51.96	99.59	45.03	49.80	52.39	94.83	49.80	54.13	55.21	57.16
		Amps	250.00	125.00	125.00	250.00	125.00	125.00	125.00	263.22	138.22	137.67	137.39	137.50
		Maximum Size of Fuse or Breaker	350	200	200	350	175	175	175	350	175	175	175	175
T111687	Load	kVA	150.11	84.44	86.60	165.99	75.06	82.99	87.32	158.05	82.99	90.21	92.02	95.26
		Amps	416.67	208.33	208.33	416.67	208.33	208.33	208.33	438.70	230.37	229.44	228.99	229.17
		Maximum Size of Fuse or Breaker	600	350	350	600	300	300	300	600	300	300	300	300
T211688 ①	Load	kVA	225.17	126.66	129.90	248.98	112.58	124.49	130.99	237.07	124.49	135.32	138.02	142.89
		Amps	625.00	312.50	312.50	625.00	312.50	312.50	312.50	658.05	345.55	344.16	343.48	343.75
		Maximum Size of Fuse or Breaker	1000	500	500	1000	450	450	450	800	400	400	400	400
T211689 ①	Load	kVA	300.22	168.87	173.21	331.98	150.11	165.99	174.65	316.10	165.99	180.42	184.03	190.53
		Amps	833.33	416.67	416.67	833.33	416.67	416.67	416.67	877.40	460.74	458.88	457.97	458.33
		Maximum Size of Fuse or Breaker	1200	700	700	1200	600	600	600	1200	600	600	600	600
Quantity Required			3	3	3	3	2	2	2	2	2	2	2	2
See Page 136 for Connection Diagrams			**A-A**	**F-F**	**F-F**	**A-A**	**B-B**	**B-B**	**B-B**	**C-C**	**E-E**	**E-E**	**E-E**	**E-E**

① See chart on page 134, for number of leads per termination.

Three Phase Application			Boosting					Bucking					
Line Voltage (Available)			**183Y 106**	**208Y 120**	**195**	**208**	**225**	**240**	**245**	**250**	**256**	**265**	**272**
Load Voltage (Output)			**208**	**236**	**208**	**240**	**240**	**208**	**230**	**234**	**240**	**234**	**240**
Catalog Number													
T181054	Load	kVA	1.13	1.28	1.13	0.63	1.30	0.56	1.33	1.35	1.39	0.72	0.74
		Amps	3.13	3.13	3.13	1.56	3.13	1.56	3.33	3.34	3.33	1.77	1.77
		Maximum Size of Fuse or Breaker	6	6	6	3	6	3	6	6	6	3	3
T181055	Load	kVA	2.25	2.55	2.25	1.27	2.60	1.13	2.65	2.71	2.77	1.43	1.47
		Amps	6.25	6.25	6.25	3.13	6.25	3.13	6.66	6.68	6.67	3.54	3.54
		Maximum Size of Fuse or Breaker	15	15	15	6	15	6	15	15	15	6	6
T181056	Load	kVA	3.38	3.83	3.38	1.90	3.90	1.69	3.98	4.06	4.16	2.15	2.21
		Amps	9.38	9.38	9.38	4.69	9.38	4.69	9.99	10.02	10.00	5.31	5.31
		Maximum Size of Fuse or Breaker	15	15	15	10	15	10	15	15	15	10	10
T181057	Load	kVA	5.63	6.39	5.63	3.17	6.50	2.81	6.63	6.77	6.93	3.59	3.68
		Amps	15.63	15.63	15.63	7.81	15.63	7.81	16.64	16.69	16.67	8.85	8.85
		Maximum Size of Fuse or Breaker	25	25	25	15	25	15	20	20	20	15	15
T181058	Load	kVA	11.26	12.77	11.26	6.33	12.99	5.63	13.26	13.53	13.86	7.17	7.36
		Amps	31.25	31.25	31.25	15.63	31.25	15.63	33.29	33.39	33.33	17.69	17.71
		Maximum Size of Fuse or Breaker	45	45	45	25	45	20	40	40	40	20	20
T181059	Load	kVA	16.89	19.16	16.89	9.50	19.49	8.44	19.89	20.30	20.78	10.76	11.04
		Amps	46.88	46.88	46.88	23.44	46.88	23.44	49.93	50.08	50.00	26.54	26.56
		Maximum Size of Fuse or Breaker	70	70	70	35	70	30	60	60	60	30	30
T113073	Load	kVA	22.52	25.55	22.52	12.67	25.98	11.26	26.52	27.06	27.71	14.34	14.72
		Amps	62.50	62.50	62.50	31.25	62.50	31.25	66.58	66.67	66.67	35.39	35.42
		Maximum Size of Fuse or Breaker	90	90	90	45	90	35	80	80	80	40	40
T113074	Load	kVA	33.77	38.32	33.77	19.00	38.97	16.89	39.87	40.59	41.57	21.52	22.08
		Amps	93.75	93.75	93.75	46.88	93.75	46.88	99.86	100.16	100.00	53.08	53.13
		Maximum Size of Fuse or Breaker	150	150	125	70	125	60	125	125	125	60	60
T113075	Load	kVA	45.03	51.10	45.03	25.33	51.96	22.52	53.04	54.13	55.43	28.69	29.44
		Amps	125.00	125.00	125.00	62.50	125.00	62.50	133.15	133.55	133.33	70.78	70.83
		Maximum Size of Fuse or Breaker	200	200	175	90	175	70	175	175	175	80	80
T113076	Load	kVA	67.55	76.64	67.55	38.00	77.94	33.77	79.57	81.19	83.14	43.03	44.17
		Amps	187.50	187.50	187.50	93.75	187.50	93.75	199.73	200.32	200.00	106.17	106.25
		Maximum Size of Fuse or Breaker	300	300	250	150	250	110	250	250	250	125	125
T113077	Load	kVA	112.58	127.74	112.58	63.33	129.90	56.29	132.61	135.32	138.56	71.72	73.50
		Amps	312.50	312.50	312.50	156.25	312.50	156.25	332.88	333.87	333.33	176.95	176.80
		Maximum Size of Fuse or Breaker	450	450	450	225	450	175	400	400	400	200	200
T213078 ①	Load	kVA	166.87	191.61	168.87	94.99	194.86	84.44	198.92	202.97	207.85	107.58	110.42
		Amps	468.75	468.75	468.75	234.38	468.75	234.38	499.32	500.80	500.00	265.42	265.63
		Maximum Size of Fuse or Breaker	700	700	700	350	700	300	600	600	600	300	300
T213079 ①	Load	kVA	225.17	255.48	225.17	126.66	259.81	112.58	265.22	270.63	277.13	143.44	147.22
		Amps	625.00	625.00	625.00	312.50	625.00	312.50	665.76	667.74	666.67	353.90	354.17
		Maximum Size of Fuse or Breaker	1000	1000	1000	450	1000	350	800	800	800	400	400
Quantity Required			3	3	2	2	2	2	2	2	2	2	2
See Page 136 for Connection Diagrams			**A-A**	**A-A**	**G-G**	**B-B**	**G-G**	**D-D**	**C-C**	**C-C**	**C-C**	**E-E**	**E-E**

① See chart on page 134, for number of leads per termination.

Three Phase Application			Boosting								Bucking							
Line Voltage (Available)			399Y 230	380	430	440	460	460	480	480	440	440	460	460	480	480	500	500
Load Voltage (Output)			480Y 277	420	473	462	506	483	528	504	400	419	438	418	457	436	455	477
Catalog Number																		
T181061	Load	kVA	0.86	0.76	0.85	1.66	0.91	1.74	0.95	1.82	0.79	1.58	1.66	0.83	1.73	0.86	0.90	1.80
		Amps	1.04	1.04	1.04	2.08	1.04	2.08	1.04	2.08	1.14	2.18	2.18	1.14	2.18	1.14	1.14	2.18
		Maximum Size of Fuse or Breaker	3	3	3	6	3	6	3	6	3	6	6	3	6	3	3	6
T181062	Load	kVA	1.73	1.51	1.70	3.33	1.82	3.48	1.90	3.63	1.59	3.17	3.31	1.66	3.46	1.73	1.80	3.61
		Amps	2.08	2.08	2.08	4.16	2.08	4.16	2.08	4.16	2.29	4.37	4.37	2.29	4.37	2.29	2.29	4.37
		Maximum Size of Fuse or Breaker	6	6	6	10	6	10	6	10	6	10	10	6	10	6	6	10
T181063	Load	kVA	2.60	2.27	2.56	4.99	2.73	5.22	2.85	5.45	2.38	4.75	4.97	2.48	5.19	2.59	2.70	5.41
		Amps	3.12	3.12	3.12	6.24	3.12	6.25	3.12	6.24	3.43	6.55	6.55	3.43	6.55	3.43	3.43	6.55
		Maximum Size of Fuse or Breaker	10	6	6	15	6	15	6	15	6	15	15	6	15	6	6	15
T181064	Load	kVA	4.33	3.78	4.26	8.32	4.56	8.70	4.76	9.08	3.96	7.92	8.28	4.14	8.64	4.32	4.51	9.02
		Amps	5.20	5.20	5.20	10.40	5.20	10.40	5.20	10.40	5.72	10.92	10.92	5.72	10.92	5.72	5.72	10.92
		Maximum Size of Fuse or Breaker	15	10	10	15	10	15	10	15	10	15	15	10	15	10	10	15
T181065	Load	kVA	8.60	7.56	8.52	16.64	9.11	17.40	9.51	18.16	7.93	15.85	16.57	8.28	17.29	8.64	9.02	18.04
		Amps	10.40	10.40	10.40	20.80	10.40	20.80	10.40	20.80	11.44	21.84	21.84	11.44	21.84	11.44	11.44	21.84
		Maximum Size of Fuse or Breaker	20	15	15	30	15	30	15	30	15	30	30	15	30	15	15	30
T181066	Load	kVA	12.90	11.34	12.77	24.97	13.67	26.10	14.27	27.24	11.89	23.77	24.85	12.42	25.93	12.96	13.52	27.07
		Amps	15.60	15.60	15.60	31.20	15.60	31.20	15.60	31.20	17.16	32.76	32.76	17.16	32.76	17.16	17.16	32.76
		Maximum Size of Fuse or Breaker	25	25	25	45	25	45	25	45	20	40	40	20	40	20	20	40
T137920	Load	kVA	17.30	15.12	17.03	33.29	18.23	34.80	19.02	36.31	15.85	31.70	33.14	16.57	34.57	17.28	18.03	36.09
		Amps	20.80	20.80	20.80	41.60	20.80	41.60	20.80	41.60	22.88	43.68	43.68	22.88	43.68	22.88	22.88	43.68
		Maximum Size of Fuse or Breaker	35	30	30	60	30	60	30	60	30	60	60	30	60	30	30	60
T137921	Load	kVA	25.90	22.69	25.55	49.93	27.34	52.20	28.53	54.47	23.78	47.55	49.71	24.85	51.86	25.92	27.05	54.13
		Amps	31.20	31.20	31.20	62.40	31.20	62.40	31.20	62.40	34.32	65.52	65.52	34.32	65.52	34.32	34.32	65.52
		Maximum Size of Fuse or Breaker	50	45	45	90	45	90	45	90	40	80	80	40	80	40	40	80
T137922	Load	kVA	34.60	30.25	34.07	66.58	36.46	69.60	38.04	72.63	31.70	63.40	66.27	33.13	69.15	34.56	36.06	72.18
		Amps	41.60	41.60	41.60	83.20	41.60	83.20	41.60	83.20	45.76	87.36	87.36	45.76	87.36	45.76	45.76	87.36
		Maximum Size of Fuse or Breaker	70	60	60	110	60	110	60	110	60	110	110	60	110	60	60	110
T137923	Load	kVA	52.00	45.45	51.18	100.03	54.69	104.57	57.07	109.12	47.63	95.25	99.57	49.77	103.89	51.92	54.18	108.44
		Amps	62.50	62.50	62.50	125.00	62.50	125.00	62.50	125.00	68.75	131.25	131.25	68.75	131.25	68.75	68.75	131.25
		Maximum Size of Fuse or Breaker	100	90	90	175	90	175	90	175	80	175	175	80	175	80	80	175
T137924	Load	kVA	86.10	75.62	85.17	166.44	91.15	174.01	95.11	181.57	79.26	158.50	165.69	82.83	172.87	86.39	90.16	180.44
		Amps	104.00	104.00	104.00	208.00	104.00	208.00	104.00	208.00	114.40	218.40	218.40	114.40	218.40	114.40	114.40	218.40
		Maximum Size of Fuse or Breaker	175	150	150	300	150	300	150	300	150	300	300	150	300	150	150	300
T243570	Load	kVA	129.30	113.43	127.75	249.66	136.72	261.01	142.67	272.36	118.89	237.75	248.53	124.24	259.31	129.59	135.23	270.66
		Amps	156.00	156.00	156.00	312.00	156.00	312.00	156.00	312.00	171.60	327.60	327.60	171.60	327.60	171.60	171.60	327.60
		Maximum Size of Fuse or Breaker	250	225	225	450	225	450	225	450	200	400	400	200	400	200	200	400
T243571 ①	Load	kVA	173.10	151.25	170.33	332.89	182.29	348.02	190.22	363.15	158.52	317.00	331.37	165.65	345.75	172.78	180.31	360.88
		Amps	208.00	208.00	208.00	416.00	208.00	416.00	208.00	416.00	228.80	436.80	436.80	228.80	436.80	228.80	228.80	436.80
		Maximum Size of Fuse or Breaker	350	300	300	600	300	600	300	600	300	600	600	300	600	300	300	600
Quantity Required			3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
See Page 136 for Connection Diagrams			F-F	B-B	B-B	G-G	B-B	G-G	B-B	G-G	E-E	C-C	C-C	E-E	C-C	E-E	E-E	C-C

① See chart on page 134, for number of leads per termination.

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 sui able for 60 Hz only. (2) Connection Diagrams A-A and F-F cannot be reverse connected.