

FactoryMation Buck-Boost Transformer Selection Guide



Excerpt From Micron Catalog:
LVGP-16C-English

Supersedes: LVGP-16B-English

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BUCK-BOOST TRANSFORMERS

Single and Three Phase Applications – 60Hz

A Buck-Boost Transformer is used to provide an economical method of correcting a lower or higher voltage to a voltage rating more suitable for efficient operation of electrical equipment.

Buck-Boost Transformers are small Kva, single phase, 600 volt class insulating transformers with dual primary and dual secondary windings. If wired as an isolation transformer, they can be utilized to provide for applications requiring 12, 16, 24, 32 or 48 Vac up through 7.5Kva. However, they are usually connected as autotransformers by utilizing one unit for single phase applications and either two or three units banked for three phase operation. They are primarily used for motor operation and should not be used for motor control circuits, to correct fluctuating line voltage or to obtain a neutral on a delta system. These applications require transformers especially designed for these specific applications.

NOTE: When installation is to be made on a grounded system, consideration must be given to the resulting voltage. Thus, on a 208 grounded wye/120 system the voltage can be boosted to 240 volts but the voltage to ground will be 139 volts. If 240/120 volts with a midpoint ground is needed, a standard two-winding transformer must be used.

The following formula can be used to calculate specific requirements.

For Single Phase

$$\text{LOAD KVA} = \frac{\text{Load Voltage} \times \text{Full Load Amps}}{1000}$$

For Three Phase

$$\text{LOAD KVA} = \frac{\text{Load Voltage} \times \text{Full Load Amps} \times 1.732}{1000}$$

For quick selection data, refer to the tables on the following pages.

Selection Requirements

First, you should have this 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 equipment.

Load Amps or Load Kva- 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 being operated. [Micron Buck-Boost transformers operate at 60 Hertz only.](#)

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

Transformer Interconnection

For three phase applications, interconnections of transformers should be made in a junction box. Two or three transformers may be used depending on an open delta (2) or wye (3) connection.

Selection Information

5-Step Selector

The tables which follow will simplify the selection of the buck-boost transformers. There are no calculations needed; simply follow these 5 steps.

1. Refer to the table having the same output voltage as the equipment that you want to operate. For example, if you are installing a 240 volt, 6Kva single phase load, use **Selection Table Number 4** (Page 23.)
2. Select the available line voltage across the top of the chart which is closest to the actual supply voltage. In the example, if the available line voltage is 213 volts, use the 212 volt Column.
3. Read down the column until you reach an output Kva or amps rating equal to or greater than the load requirements. Since 6Kva, in the example, is not listed, use the next higher rating or 7.5Kva.
4. Read across to the far left columns for the catalog number and quantity of transformers for your application. In the example, you will need (1) catalog number J001K1EB1A02.
5. Connect the selected buck-boost transformer(s) in accordance with the connection diagram specified at the bottom of the “Available Voltage” column. In the example, Diagram “F” would be used (Page 24.)

NOTE: For 1 phase connections and 3 phase open delta connections, inputs and outputs may be reversed. Kva capacity remains constant.

Buck-Boost

Product Groups

KVA	CATALOG NUMBER	DESIGN TYPE	TEMP RISE °C	H	W	D	WEIGHT LBS	FRAME NUMBER
GROUP "A": PRI: 120 X 240 SEC: 16/32 60 HZ								
.050	J050A1EB1A01	1E	115	8.91	4.11	4.00	7	52
.100	J100A1EB1A01	1E	115	8.91	4.11	4.00	7	54
.150	J150A1EB1A01	1E	115	8.91	4.11	4.00	8	55
.250	J250A1EB1A02	1E	115	9.34	4.45	5.18	12	57P
.500	J500A1EB1A02	1E	115	9.34	4.45	5.18	13	57P
.750	J750A1EB1A02	1E	115	11.68	4.99	5.99	21	58AP
1	J001K1EB1A02	1E	115	13.03	5.74	6.56	31	67P
1.5	J1X5K1EB1A02	1E	115	13.03	5.74	6.56	40	67P
2	J002K1EB1A02	1E	115	13.78	6.22	6.32	40	68P
3	J003K1EB1A03	1E	115	14.25	7.69	8.00	65	176
5	J005K1EB1A03	1E	115	16.00	10.38	9.89	113	177
7.5	J7X5K1EB1A03	1E	115	16.00	10.38	9.89	123	178

KVA	CATALOG NUMBER	DESIGN TYPE	TEMP RISE °C	H	W	D	WEIGHT LBS	FRAME NUMBER
GROUP "B": PRI: 240 X 480 SEC: 24/48 60 HZ								
.050	J050A1KC1A01	1E	115	8.91	4.11	4.00	7	52
.100	J100A1KC1A01	1E	115	8.91	4.11	4.00	7	54
.150	J150A1KC1A01	1E	115	8.91	4.11	4.00	8	55
.250	J250A1KC1A02	1E	115	9.34	4.45	5.18	12	57P
.500	J500A1KC1A02	1E	115	9.34	4.45	5.18	13	57P
.750	J750A1KC1A02	1E	115	11.68	4.99	5.99	21	58AP
1	J001K1KC1A02	1E	115	13.03	5.74	6.56	31	67P
1.5	J1X5K1KC1A02	1E	115	13.03	5.74	6.56	40	67P
2	J002K1KC1A02	1E	115	13.78	6.22	6.32	40	68P
3	J003K1KC1A03	1E	115	14.25	7.69	8.00	65	176
5	J005K1KC1A03	1E	115	16.00	10.38	9.89	113	177
7.5	J7X5K1KC1A03	1E	115	16.00	10.38	9.89	123	178

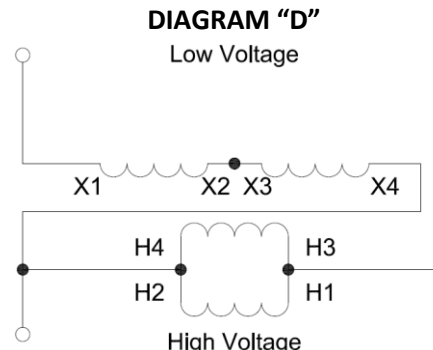
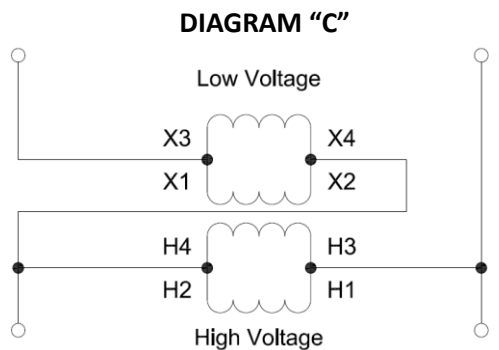
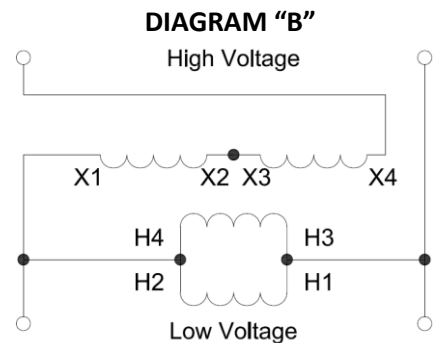
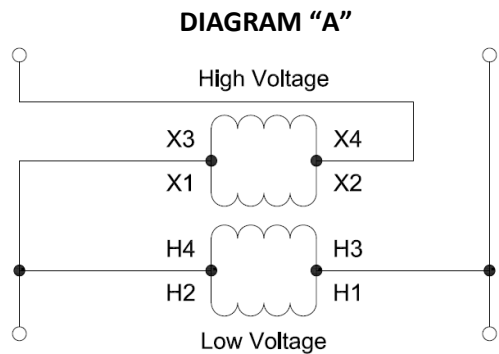
KVA	CATALOG NUMBER	DESIGN TYPE	TEMP RISE °C	H	W	D	WEIGHT LBS	FRAME NUMBER
GROUP "C": PRI: 120 X 240 SEC: 12/24 60 HZ								
.050	J050A1EA1A01	1E	115	8.91	4.11	4.00	7	52
.100	J100A1EA1A01	1E	115	8.91	4.11	4.00	7	54
.150	J150A1EA1A01	1E	115	8.91	4.11	4.00	8	55
.250	J250A1EA1A02	1E	115	9.34	4.45	5.18	12	57P
.500	J500A1EA1A02	1E	115	9.34	4.45	5.18	13	57P
.750	J750A1EA1A02	1E	115	11.68	4.99	5.99	21	58AP
1	J001K1EA1A02	1E	115	13.03	5.74	6.56	31	67P
1.5	J1X5K1EA1A02	1E	115	13.03	5.74	6.56	40	67P
2	J002K1EA1A02	1E	115	13.78	6.22	6.32	40	68P
3	J003K1EA1A03	1E	115	14.25	7.69	8.00	65	176
5	J005K1EA1A03	1E	115	16.00	10.38	9.89	113	177
7.5	J7X5K1EA1A03	1E	115	16.00	10.38	9.89	123	178

Need Single Phase 115 Volts, 60Hz (Table Number 1)

Units Req'd	Unit Kva	Catalog Number	Have Available Voltage Of																				
			84		91		96		100		102		105		127		130		138		146		
			Max Load																				
Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps	
1	.05	J050A1EA1A01	-	-	-	-	0.24	2.09	-	-	-	-	0.48	4.17	0.54	4.58	-	-	0.29	2.50	-	-	
1	.05	J050A1EB1A01	0.13	1.14	0.18	1.56	-	-	0.31	2.70	0.36	3.13	-	-	-	-	0.41	3.54	-	-	0.23	1.98	
1	.10	J100A1EA1A01	-	-	-	-	0.48	4.17	-	-	-	-	0.96	8.33	1.10	9.17	-	-	0.58	5.00	-	-	
1	.10	J100A1EB1A01	0.26	2.29	0.36	3.12	-	-	0.62	5.41	0.72	6.25	-	-	-	-	0.82	7.08	-	-	0.46	3.95	
1	.15	J150A1EA1A01	-	-	-	-	0.72	6.25	-	-	-	-	1.44	12.5	1.60	13.7	-	-	0.87	7.50	-	-	
1	.15	J150A1EB1A01	0.39	3.44	0.54	4.69	-	-	0.93	8.12	1.08	9.37	-	-	-	-	1.30	10.6	-	-	0.69	5.93	
1	.25	J250A1EA1A02	-	-	-	-	1.20	10.4	-	-	-	-	2.39	20.8	2.63	22.9	-	-	1.44	12.5	-	-	
1	.25	J250A1EB1A02	0.66	5.73	0.90	7.81	-	-	1.56	13.5	1.80	15.6	-	-	-	-	2.03	17.7	-	-	1.14	9.88	
1	.50	J500A1EA1A02	-	-	-	-	2.40	20.8	-	-	-	-	4.79	41.6	5.27	45.8	-	-	2.87	25	-	-	
1	.50	J500A1EB1A02	1.32	11.5	1.80	15.6	-	-	3.11	27.1	3.59	31.2	-	-	-	-	4.07	35.4	-	-	2.27	19.8	
1	.75	J750A1EA1A02	-	-	-	-	3.60	31.2	-	-	-	-	7.19	62.4	7.90	68.7	-	-	4.31	37.5	-	-	
1	.75	J750A1EB1A02	1.98	17.2	2.70	23.4	-	-	4.67	40.6	5.39	46.8	-	-	-	-	6.10	53.1	-	-	3.41	29.6	
1	1.0	J001K1EA1A02	-	-	-	-	4.79	41.7	-	-	-	-	9.58	83.3	10.5	91.7	-	-	5.75	50	-	-	
1	1.0	J001K1EB1A02	2.64	22.9	3.59	31.2	-	-	6.23	54.1	7.19	62.5	-	-	-	-	8.14	70.8	-	-	4.55	39.5	
1	1.5	J1X5K1EA1A02	-	-	-	-	7.20	62.5	-	-	-	-	14.4	125	15.8	137	-	-	8.62	75	-	-	
1	1.5	J1X5K1EB1A02	3.95	34.4	5.39	46.9	-	-	9.34	81.2	10.8	93.7	-	-	-	-	12.2	106	-	-	6.82	59.3	
1	2.0	J002K1EA1A02	-	-	-	-	9.58	83.3	-	-	-	-	19.2	16.7	21.1	183	-	-	11.5	100	-	-	
1	2.0	J002K1EB1A02	5.27	45.8	7.19	62.5	-	-	12.5	108	14.4	125	-	-	-	-	16.3	142	-	-	9.10	79.2	
1	3.0	J003K1EA1A03	-	-	-	-	14.37	125.1	-	-	-	-	28.7	249.9	31.5	275.1	-	-	17.3	150	-	-	
1	3.0	J003K1EB1A03	7.92	68.7	10.77	93.6	-	-	18.69	162.3	21.57	187.5	-	-	-	-	24.4	212.4	-	-	13.6	118.5	
1	5.0	J005K1EA1A03	-	-	-	-	23.95	208.5	-	-	-	-	47.9	416.5	52.5	458.5	-	-	28.7	250	-	-	
1	5.0	J005K1EB1A03	13.2	115	18	156	-	-	31.15	270.5	35.95	312.5	-	-	-	-	40.7	354	-	-	22.7	197.5	
1	7.5	J7X5K1EA1A03	-	-	-	-	36	312	-	-	-	-	71.9	624	79	687	-	-	43.1	357	-	-	
1	7.5	J7X5K1EB1A03	19.8	172	27	234	-	-	46.7	406	53.9	468	-	-	-	-	61	531	-	-	34.1	296	
Connection Diagram			D		B		B		C		A		A		A		A		B		B		

Need Single Phase 120 Volts, 60Hz (Selection Table Number 2)

Units Req'd	Unit Kva	Use Catalog Number	Have Available Voltage Of																			
			88		95		100		104		106		109		132		136		144		152	
			Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps	
1	.05	J050A1EA1A01	-	-	-	-	0.25	2.09	-	-	-	-	0.50	4.17	0.55	4.58	0.30	2.50	-	-	-	-
1	.05	J050A1EB1A01	0.14	1.15	0.19	1.56	-	-	0.33	2.70	0.38	3.13	-	-	-	-	0.43	3.54	-	-	0.24	1.98
1	.10	J100A1EA1A01	-	-	-	-	0.50	4.17	-	-	-	-	1.00	8.33	1.10	9.17	-	-	0.60	5.00	-	-
1	.10	J100A1EB1A01	0.29	2.29	0.38	3.12	-	-	0.65	5.41	0.75	6.25	-	-	-	-	0.85	7.08	-	-	0.48	3.95
1	.15	J150A1EA1A01	-	-	-	-	0.75	6.25	-	-	-	-	1.50	12.5	1.60	13.7	-	-	0.90	7.50	-	-
1	.15	J150A1EB1A01	0.41	3.44	0.56	4.69	-	-	0.98	8.12	1.12	9.37	-	-	-	-	1.27	10.6	-	-	0.71	5.93
1	.25	J250A1EA1A02	-	-	-	-	1.25	10.4	-	-	-	-	2.50	20.8	2.75	22.9	-	-	1.50	12.5	-	-
1	.25	J250A1EB1A02	0.69	5.73	0.94	7.81	-	-	1.62	13.5	1.87	15.6	-	-	-	-	2.12	17.7	-	-	1.19	9.88
1	.50	J500A1EA1A02	-	-	-	-	2.50	20.8	-	-	-	-	5.00	41.6	5.50	45.8	-	-	3.00	25	-	-
1	.50	J500A1EB1A02	1.37	11.5	1.87	15.6	-	-	3.25	27.1	3.75	31.2	-	-	-	-	4.25	35.4	-	-	2.37	19.8
1	.75	J750A1EA1A02	-	-	-	-	3.75	31.2	-	-	-	-	7.50	62.4	8.25	68.7	-	-	4.50	37.5	-	-
1	.75	J750A1EB1A02	2.06	17.2	2.82	23.4	-	-	4.87	40.6	5.62	46.8	-	-	-	-	6.37	53.1	-	-	3.56	29.6
1	1.0	J001K1EA1A02	-	-	-	-	5.00	41.7	-	-	-	-	10	83.3	11	91.7	-	-	6.00	50	-	-
1	1.0	J001K1EB1A02	2.75	22.9	3.75	31.2	-	-	6.50	54.1	7.50	62.5	-	-	-	-	8.50	70.8	-	-	4.75	39.5
1	1.5	J1X5K1EA1A02	-	-	-	-	7.50	62.5	-	-	-	-	15	125	16.5	137	-	-	9.00	75	-	-
1	1.5	J1X5K1EB1A02	4.12	34.4	5.62	46.9	-	-	9.75	81.2	11.2	93.7	-	-	-	-	12.7	106	-	-	7.12	59.3
1	2.0	J002K1EA1A02	-	-	-	-	10	83.3	-	-	-	-	20	167	22	183	-	-	12	100	-	-
1	2.0	J002K1EB1A02	5.50	45.8	7.50	62.5	-	-	13	108	15	125	-	-	-	-	17	142	-	-	9.50	79.2
1	3.0	J003K1EA1A03	-	-	-	-	15	125.1	-	-	-	-	30	249.9	33	275.1	-	-	18	150	-	-
1	3.0	J003K1EB1A03	8.25	68.7	11.25	93.6	-	-	19.5	162.3	22.5	187.5	-	-	-	-	25.5	212.4	-	-	14.25	118.5
1	5.0	J005K1EA1A03	-	-	-	-	25	208.5	-	-	-	-	50	416.5	55	458.5	-	-	30	250	-	-
1	5.0	J005K1EB1A03	13.75	114.5	18.75	156	-	-	32.5	270.5	37.5	312.5	-	-	-	-	42.5	354	-	-	23.7	197.5
1	7.5	J7X5K1EA1A03	-	-	-	-	37.5	312	-	-	-	-	75	624	82.5	687	-	-	45	375	-	-
1	7.5	J7X5K1EB1A03	20.6	172	28.2	234	-	-	48.7	406	56.2	468	-	-	-	-	63.7	531	-	-	35.6	296
Connection Diagram			D	B	B	C	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B

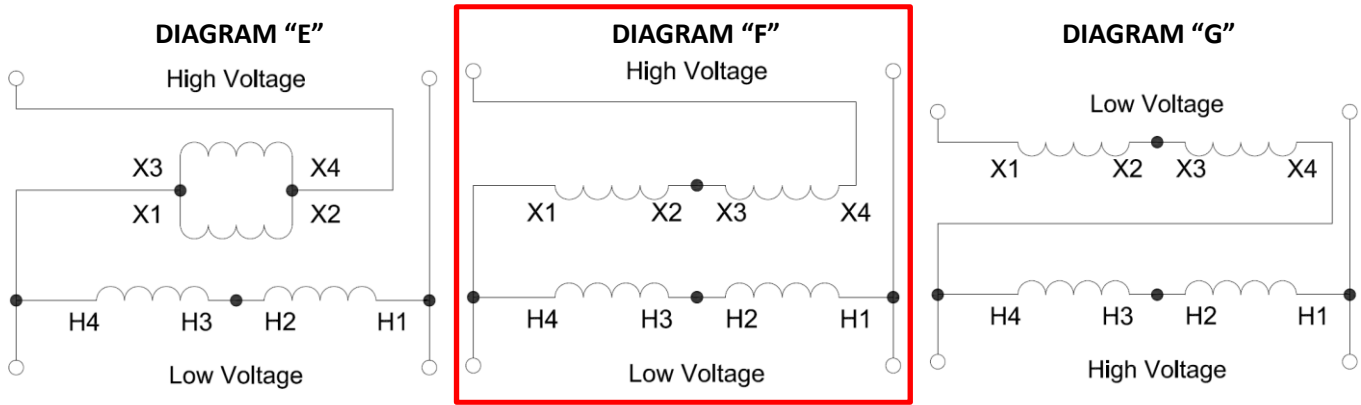


Need Single Phase 230Volts, 60Hz (Selection Table Number 3)

Units Req'd	Unit Kva	Use Catalog Number	Have Available Voltage Of																			
			199	203	207	209	216	219	242	246	253	260										
			Max Load																			
			Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps									
1	.05	J050A1EA1A01	-	-	-	-	-	-	-	-	-	-	-	-								
1	.05	J050A1EB1A01	0.31	1.36	0.36	1.56	0.43	1.88	0.48	2.08	0.72	3.12	-	-	0.77	3.34	-	-	0.41	1.77		
1	.10	J100A1EA1A01	-	-	-	-	0.86	3.75	0.96	4.17	-	-	1.92	8.33	2.01	8.75	-	-	1.05	4.58	-	-
1	.10	J100A1EB1A01	0.62	2.71	0.72	3.12	-	-	-	-	1.44	6.25	-	-	-	-	1.53	6.67	-	-	0.82	3.54
1	.15	J150A1EA1A01	-	-	-	-	1.29	5.62	1.44	6.25	-	-	2.87	12.5	3.02	13.1	-	-	1.58	6.87	-	-
1	.15	J150A1EB1A01	0.93	4.06	1.08	4.69	-	-	-	-	2.16	9.37	-	-	-	-	2.30	10	-	-	1.22	5.31
1	.25	J250A1EA1A02	-	-	-	-	2.15	9.37	2.39	10.4	-	-	4.79	20.8	5.03	21.9	-	-	2.63	11.5	-	-
1	.25	J250A1EB1A02	1.55	6.77	1.80	7.81	-	-	-	-	3.59	15.6	-	-	-	-	3.83	16.7	-	-	2.04	8.85
1	.50	J500A1EA1A02	-	-	-	-	4.31	18.7	4.79	20.8	-	-	9.58	41.6	10.1	43.7	-	-	5.27	22.9	-	-
1	.50	J500A1EB1A02	3.11	13.5	3.60	15.6	-	-	-	-	7.19	31.2	-	-	-	-	7.67	33.3	-	-	4.07	17.7
1	.75	J750A1EA1A02	-	-	-	-	6.46	28.2	7.19	31.2	-	-	14.4	62.4	15.1	65.6	-	-	7.90	34.4	-	-
1	.75	J750A1EB1A02	4.66	20.3	5.40	23.4	-	-	-	-	10.8	46.8	-	-	-	-	11.5	50	-	-	6.11	26.6
1	1.0	J001K1EA1A02	-	-	-	-	8.62	37.5	9.58	41.7	-	-	19.2	83.3	20.1	87.5	-	-	10.5	45.8	-	-
1	1.0	J001K1EB1A02	6.23	27.1	7.2	31.2	-	-	-	-	14.4	62.5	-	-	-	-	15.3	66.7	-	-	8.15	35.4
1	1.5	J1X5K1EA1A02	-	-	-	-	12.9	56.2	14.4	62.5	-	-	28.7	125	30.2	131	-	-	15.8	68.7	-	-
1	1.5	J1X5K1EB1A02	9.34	40.6	10.8	46.9	-	-	-	-	21.6	93.7	-	-	-	-	23	100	-	-	12.2	53.1
1	2.0	J002K1EA1A02	-	-	-	-	17.2	75	19.2	83.3	-	-	38.3	167	40.2	175	-	-	21.1	91.7	-	-
1	2.0	J002K1EB1A02	12.5	54.2	14.4	62.5	-	-	-	-	28.7	125	-	-	-	-	30.7	133	-	-	16.3	70.8
1	3.0	J003K1EA1A03	-	-	-	-	25.8	112.5	28.7	125.1	-	-	57.6	249.9	60.3	262.5	-	-	31.5	137.4	-	-
1	3.0	J003K1EB1A03	18.6	81.3	21.6	93.6	-	-	-	-	43.2	187.5	-	-	-	-	45.9	200.1	-	-	24.4	106.2
1	5.0	J005K1EA1A03	-	-	-	-	43.1	187.5	47.9	208.5	-	-	96	416.5	100.5	437.5	-	-	52.5	229	-	-
1	5.0	J005K1EB1A03	31.1	135.5	36	156	-	-	-	-	72	312.5	-	-	-	-	76.5	333.5	-	-	40.7	177
1	7.5	J7X5K1EA1A03	-	-	-	-	64.6	282	71.9	312	-	-	144	624	151	656	-	-	79	344	-	-
1	7.5	J7X5K1EB1A03	46.6	203	54	234	-	-	-	-	108	468	-	-	-	-	115	500	-	-	61.1	266
Connection Diagram			G	F	G	F	E	E	E	E	E	F	F									

1. Need Single Phase 240 Volts, 60Hz (Selection Table Number 4)

Units Req'd	Unit Kva	Use Catalog Number	Have Available Voltage Of																				
			208	212	216	218	225	229	252	256	264	272											
			Max Load																				
			Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps										
1	.05	J050A1EA1A01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	.05	J050A1EB1A01	0.32	1.35	0.38	1.56	0.45	1.88	0.50	2.08	0.75	3.12	1.00	4.16	1.05	4.38	0.80	3.33	0.55	2.29	0.42	1.77	
1	.10	J100A1EA1A01	-	-	-	-	0.90	3.75	1.00	4.17	-	-	2.00	8.33	2.10	8.75	-	-	1.10	4.58	-	-	
1	.10	J100A1EB1A01	0.65	2.71	0.75	3.12	-	-	-	-	1.50	6.25	-	-	-	-	1.60	6.67	-	-	0.85	3.54	
1	.15	J150A1EA1A01	-	-	-	-	1.35	5.62	1.50	6.25	-	-	3.00	12.5	3.15	13.1	-	-	1.65	6.87	-	-	
1	.15	J150A1EB1A01	0.98	4.06	1.12	4.69	-	-	-	-	2.25	9.37	-	-	-	-	2.40	10	-	-	1.27	5.31	
1	.25	J250A1EA1A02	-	-	-	-	2.25	9.37	2.50	10.4	-	-	5.00	20.8	5.25	21.9	-	-	2.75	11.5	-	-	
1	.25	J250A1EB1A02	1.62	6.77	1.87	7.81	-	-	-	-	3.75	15.6	-	-	-	-	4.00	16.7	-	-	2.12	8.85	
1	.50	J500A1EA1A02	-	-	-	-	4.50	18.7	5.00	20.8	-	-	10	41.6	10.5	43.7	-	-	5.50	22.9	-	-	
1	.50	J500A1EB1A02	3.25	13.5	3.75	15.6	-	-	-	-	7.50	31.2	-	-	-	-	8.00	33.3	-	-	4.25	17.7	
1	.75	J750A1EA1A02	-	-	-	-	6.75	28.2	7.5	31.2	-	-	15	62.4	15.7	65.6	-	-	8.25	34.4	-	-	
1	.75	J750A1EB1A02	4.87	20.3	5.62	23.4	-	-	-	-	11.2	46.8	-	-	-	-	12	50	-	-	6.37	26.6	
1	1.0	J001K1EA1A02	-	-	-	-	9.00	37.5	10	41.7	-	-	20	83.3	21	87.5	-	-	11	45.8	-	-	
1	1.0	J001K1EB1A02	6.50	27.1	7.2	31.2	-	-	-	-	15	62.5	-	-	-	-	16	66.7	-	-	8.5	35.4	
1	1.5	J1X5K1EA1A02	-	-	-	-	13.5	56.2	15	62.5	-	-	30	125	31.5	131	-	-	16.5	68.7	-	-	
1	1.5	J1X5K1EB1A02	9.75	40.6	11.2	46.9	-	-	-	-	22.5	93.7	-	-	-	-	24	100	-	-	12.7	53.1	
1	2.0	J002K1EA1A02	-	-	-	-	18	75	20	83.3	-	-	40	167	42	175	-	-	22	91.7	-	-	
1	2.0	J002K1EB1A02	13	54.2	15	62.5	-	-	-	-	30	125	-	-	-	-	32	133	-	-	17	70.8	
1	3.0	J003K1EA1A03	-	-	-	-	27	112.5	30	125.1	-	-	60	249.9	63	262.5	-	-	33	137.4	-	-	
1	3.0	J003K1EB1A03	19.5	81.3	22.5	93.6	-	-	-	-	45	187.5	-	-	-	-	48	200.1	-	-	25.5	106.2	
1	5.0	J005K1EA1A03	-	-	-	-	45	187	50	208	-	-	100	416.5	105	437.5	-	-	55	229	-	-	
1	5.0	J005K1EB1A03	32.5	135	37.5	156	-	-	-	-	75	312	-	-	-	-	80	333	-	-	42.5	177	
1	7.5	J7X5K1EA1A03	-	-	-	-	67.5	282	75	312	-	-	150	624	157	656	-	-	82.5	344	-	-	
1	7.5	J7X5K1EB1A03	48.7	203	56.2	234	-	-	-	-	112	468	-	-	-	-	120	500	-	-	63.7	266	
Connection Diagram			G	F	G	F	E	E	E	E	F	F											



THREE PHASE APPLICATIONS

WARNING! THREE PHASE AUTOTRANSFORMERS SHOULD NEVER BE USED TO OBTAIN 4-WIRE OUTPUT WITH 3-WIRE INPUT. 4-WIRE OUTPUT REQUIRES 4-WIRE WYE INPUT.

Need Three Phase Open Delta 230 Volts, 60Hz (Selection Table Number 5)

Units Req'd	Unit Kva	Use Catalog Number	Have Available Voltage Of																				
			199	203	207	209	216	219	242	246	253	260											
			Max Load																				
			Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps								
2	.05	J050A1EA1A01	-	-	-	0.75	1.87	0.83	2.08	-	-	1.66	4.17	1.74	4.37	-	-	0.91	2.29	-	-		
2	.05	J050A1EB1A01	0.54	1.35	0.62	1.56	-	-	-	-	1.24	3.12	-	-	-	-	1.33	3.33	-	-	0.70	1.77	
2	.10	J100A1EA1A01	-	-	-	-	1.49	3.75	1.66	4.17	-	-	3.32	8.33	3.48	8.75	-	-	1.83	4.58	-	-	
2	.10	J100A1EB1A01	1.08	2.71	1.24	3.12	-	-	-	-	2.49	6.25	-	-	-	-	2.65	6.67	-	-	1.41	3.54	
2	.15	J150A1EA1A01	-	-	-	-	2.24	5.62	2.49	6.25	-	-	4.98	12.5	5.23	13.1	-	-	2.74	6.87	-	-	
2	.15	J150A1EB1A01	1.62	4.06	1.87	4.69	-	-	-	-	3.73	9.37	-	-	-	-	3.98	10	-	-	2.12	5.13	
2	.25	J250A1EA1A02	-	-	-	-	3.30	9.37	4.15	10.4	-	-	8.30	20.8	8.71	21.9	-	-	4.56	11.5	-	-	
2	.25	J250A1EB1A02	2.70	6.77	3.11	7.81	-	-	-	-	6.22	15.6	-	-	-	-	6.64	16.7	-	-	3.52	8.85	
2	.50	J500A1EA1A02	-	-	-	-	7.47	18.7	8.30	20.8	-	-	16.6	41.7	17.4	43.7	-	-	9.73	22.9	-	-	
2	.50	J500A1EB1A02	5.39	13.5	6.22	15.6	-	-	-	-	12.4	31.2	-	-	-	-	13.3	33.3	-	-	7.05	17.7	
2	.75	J750A1EA1A02	-	-	-	-	11.2	28.2	12.4	31.2	-	-	24.9	62.4	26.1	65.6	-	-	13.7	34.4	-	-	
2	.75	J750A1EB1A02	8.09	20.3	9.33	23.4	-	-	-	-	18.7	46.8	-	-	-	-	19.9	50	-	-	10.6	26.6	
2	1.0	J001K1EA1A02	-	-	-	-	14.9	37.5	16.6	41.7	-	-	33.2	83.3	34.8	87.5	-	-	18.3	45.8	-	-	
2	1.0	J001K1EB1A02	10.8	27.1	12.4	31.2	-	-	-	-	24.9	62.5	-	-	-	-	26.5	66.7	-	-	14.1	35.4	
2	1.5	J1X5K1EA1A02	-	-	-	-	22.4	56.2	24.9	62.5	-	-	49.8	125	52.3	131	-	-	27.4	68.7	-	-	
2	1.5	J1X5K1EB1A02	16.2	40.6	18.7	46.9	-	-	-	-	37.3	93.7	-	-	-	-	39.8	100	-	-	21.2	53.1	
2	2.0	J002K1EA1A02	-	-	-	-	29.9	75	33.2	83.3	-	-	66.4	167	69.7	175	-	-	36.5	91.7	-	-	
2	2.0	J002K1EB1A02	21.6	54.2	24.9	62.5	-	-	-	-	49.8	125	-	-	-	-	53.1	133	-	-	28.2	70.8	
2	3.0	J003K1EA1A03	-	-	-	-	44.7	112.5	49.8	125.1	-	-	99.6	249.9	104.4	262.5	-	-	54.9	137.4	-	-	
2	3.0	J003K1EB1A03	32.4	81.3	32.7	93.6	-	-	-	-	74.7	187.5	-	-	-	-	79.5	200	-	-	42.3	106.2	
2	5.0	J005K1EA1A03	-	-	-	-	74.7	187	83	208	-	-	166	417	174	437	-	-	91.3	229	-	-	
2	5.0	J005K1EB1A03	53.9	135	62.2	156	-	-	-	-	124	312.5	-	-	-	-	133	333	-	-	70.5	177	
2	7.5	J7X5K1EA1A03	-	-	-	-	112	282	124	312	-	-	249	624	261	656	-	-	137	344	-	-	
2	7.5	J7X5K1EB1A03	80.9	203	93.3	234	-	-	-	-	187	468	-	-	-	-	199	500	-	-	106	266	
Connection Diagram			L	K	L	K	I	I	I	I	I	I	I	I	K	K							

Need Three Phase Open Delta 240 Volts, 60 Hz (Selection Table Number 6)

Units Req'd	Unit Kva	Use Catalog Number	Have Available Voltage Of																			
			208	212	216	218	225	229	252	256	264	272										
			Max Load																			
			Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps							
2	.05	J050A1EA1A01	-	-	-	-	0.73	1.87	0.87	2.08	-	-	1.73	4.16	1.82	4.37	-	-	0.95	2.29	-	-
2	.05	J050A1EB1A01	0.56	1.35	0.65	1.56	-	-	-	-	1.30	3.12	-	-	-	-	1.38	3.33	-	-	0.74	1.77
2	.10	J100A1EA1A01	-	-	-	-	1.56	3.75	1.73	4.17	-	-	3.46	8.33	3.64	8.75	-	-	1.91	4.58	-	-
2	.10	J100A1EB1A01	1.13	2.71	1.30	3.12	-	-	-	-	2.60	6.25	-	-	-	-	2.77	6.67	-	-	1.47	3.54
2	.15	J150A1EA1A01	-	-	-	-	2.34	5.62	2.60	6.25	-	-	5.19	12.5	5.45	13.1	-	-	2.86	6.87	-	-
2	.15	J150A1EB1A01	1.69	4.06	1.95	4.69	-	-	-	-	3.90	9.37	-	-	-	-	4.15	10	-	-	2.21	5.31
2	.25	J250A1EA1A02	-	-	-	-	3.90	9.37	4.33	10.4	-	-	8.66	20.8	9.09	21.9	-	-	4.76	11.5	-	-
2	.25	J250A1EB1A02	2.81	6.77	3.25	7.81	-	-	-	-	6.49	15.6	-	-	-	-	6.92	16.7	-	-	3.68	8.85
2	.50	J500A1EA1A02	-	-	-	-	7.79	18.7	8.66	20.8	-	-	17.3	41.6	18.2	43.7	-	-	9.53	22.9	-	-
2	.50	J500A1EB1A02	5.63	13.5	6.50	15.6	-	-	-	-	13	31.2	-	-	-	-	13.8	33.3	-	-	7.36	17.7
2	.75	J750A1EA1A02	-	-	-	-	11.7	28.2	13	31.2	-	-	26	62.4	27.3	65.6	-	-	14.3	34.4	-	-
2	.75	J750A1EB1A02	8.44	20.3	9.75	23.4	-	-	-	-	19.5	46.8	-	-	-	-	20.8	50	-	-	11	26.6
2	1.0	J001K1EA1A02	-	-	-	-	15.6	37.5	17.3	41.7	-	-	34.6	83.3	36.4	87.5	-	-	19.1	45.8	-	-
2	1.0	J001K1EB1A02	11.3	27.1	13	31.2	-	-	-	-	26	62.5	-	-	-	-	27.7	66.7	-	-	14.7	35.4
2	1.5	J1X5K1EA1A02	-	-	-	-	23.4	56.2	26	62.5	-	-	51.9	125	54.5	131	-	-	28.6	68.7	-	-
2	1.5	J1X5K1EB1A02	16.9	40.6	19.5	46.9	-	-	-	-	39	93.7	-	-	-	-	41.5	100	-	-	22.1	53.1
2	2.0	J002K1EA1A02	-	-	-	-	31.2	75	34.6	83.3	-	-	69.3	167	72.7	175	-	-	38.1	91.7	-	-
2	2.0	J002K1EB1A02	22.5	54.2	26	62.5	-	-	-	-	25	125	-	-	-	-	55.4	133	-	-	29.4	70.8
2	3.0	J003K1EA1A03	-	-	-	-	46.8	112.5	51.9	125.1	-	-	103.8	249.9	109.2	262.5	-	-	57.3	137.4	-	-
2	3.0	J003K1EB1A03	33.9	81.3	39	93.6	-	-	-	-	78	187.5	-	-	-	-	83.1	200	-	-	44.1	106.2
2	5.0	J005K1EA1A03	-	-	-	-	77.9	187	86.6	208	-	-	173	416	182	437	-	-	95.3	229	-	-
2	5.0	J005K1EB1A03	56.3	135	65	156	-	-	-	-	130	312	-	-	-	-	138	333	-	-	73.6	177
2	7.5	J7X5K1EA1A03	-	-	-	-	117	282	130	312	-	-	260	624	273	656	-	-	143	344	-	-
2	7.5	J7X5K1EB1A03	84.4	203	97.5	234	-	-	-	-	195	468	-	-	-	-	208	500	-	-	110	266
Connection Diagram			L	K	L	K	I	I	I	I	I	I	I	I	I	I	I	I	K	K	K	K

DIAGRAM "I"
High Voltage

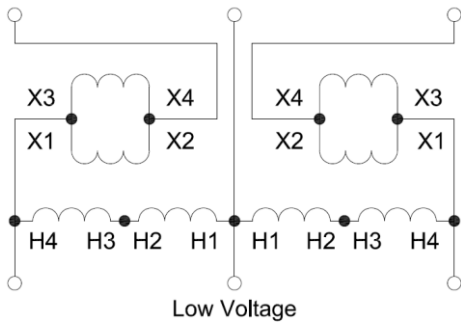


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High Voltage

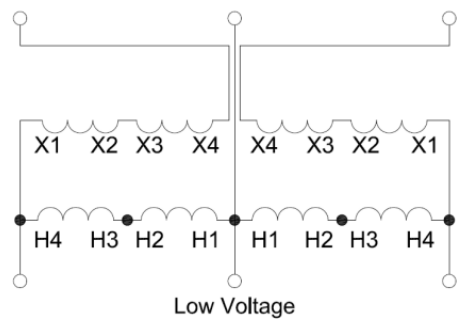
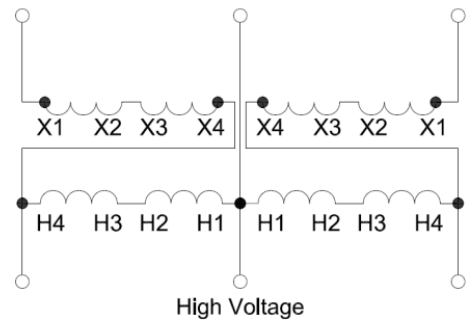


DIAGRAM "L"
Low Voltage

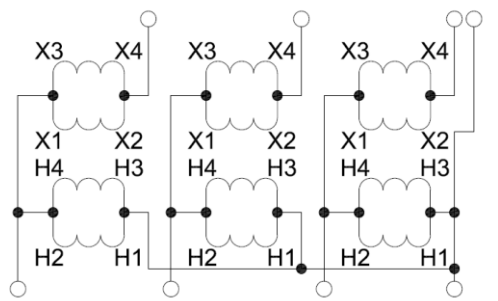


Need Three Phase Wye 208 Volts, 60Hz (Selection Table Number 7)

Units Req'd	Unit Kva	Use Catalog Number	Have Available Voltage Of																			
			152	265	173	180	184	189	229	236	250	264										
			Max Load																			
			Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps	Kva-Amps								
3	.05	J050A1EA1A01	-	-	-	-	0.75	2.08	-	-	-	-	1.50	4.16	1.65	4.58	0.90	2.50	-	-		
3	.05	J050A1EB1A01	0.41	1.15	0.56	1.56	-	-	0.98	2.71	1.12	3.12	-	-	-	-	1.27	3.54	-	0.71	1.98	
3	.10	J100A1EA1A01	-	-	-	-	1.50	4.17	-	-	-	-	3.00	8.33	3.30	9.17	-	-	1.80	5.00	-	-
3	.10	J100A1EB1A01	0.82	2.29	1.12	3.12	-	-	1.95	5.41	2.25	6.25	-	-	-	-	2.55	7.08	-	-	1.42	3.95
3	.15	J150A1EA1A01	-	-	-	-	2.25	6.25	-	-	-	-	4.50	12.5	4.95	13.7	-	-	2.70	7.50	-	-
3	.15	J150A1EB1A01	1.24	3.44	1.69	4.69	-	-	2.92	8.12	3.73	9.37	-	-	-	-	3.82	10.6	-	-	2.14	5.93
3	.25	J250A1EA1A02	-	-	-	-	3.75	104	-	-	-	-	7.50	20.8	8.25	22.9	-	-	4.50	12.5	-	-
3	.25	J250A1EB1A02	2.06	5.73	2.81	7.81	-	-	4.87	13.5	5.62	15.6	-	-	-	-	6.35	17.7	-	-	3.56	9.88
3	.50	J500A1EA1A02	-	-	-	-	7.50	20.8	-	-	-	-	15	41.6	16.5	45.8	-	-	9.0	25	-	-
3	.50	J500A1EB1A02	4.12	11.5	5.62	15.6	-	-	9.75	27.1	11.2	31.2	-	-	-	-	12.7	35.4	-	-	7.12	19.3
3	.75	J750A1EA1A02	-	-	-	-	11.2	31.2	-	-	-	-	22.5	62.4	24.7	68.7	-	-	13.5	37.5	-	-
3	.75	J750A1EB1A02	6.19	17.2	8.44	23.4	-	-	14.6	40.6	16.8	46.8	-	-	-	-	19	53.1	-	-	10.7	29.3
3	1.0	J001K1EA1A02	-	-	-	-	15	41.7	-	-	-	-	30	83.3	33	91.7	-	-	18	50	-	-
3	1.0	J001K1EB1A02	8.25	22.9	11.2	31.2	-	-	19.5	54.1	22.5	62.5	-	-	-	-	25.5	70.8	-	-	14.2	39.5
3	1.5	J1X5K1EA1A02	-	-	-	-	22.5	62.5	-	-	-	-	45	125	49.5	137	-	-	27	75	-	-
3	1.5	J1X5K1EB1A02	12.4	34.4	16.9	46.9	-	-	29.2	81.2	33.7	93.7	-	-	-	-	38.2	106	-	-	21.4	59.3
3	2.0	J002K1EA1A02	-	-	-	-	30	83.3	-	-	-	-	60	167	66	183	-	-	361	100	-	-
3	2.0	J002K1EB1A02	16.5	45.8	22.5	62.5	-	-	39	108	45	125	-	-	-	-	51	142	-	-	28.5	79.2
3	3.0	J003K1EA1A03	-	-	-	-	45	125	-	-	-	-	90	249.9	99	275.1	-	-	54	150	-	-
3	3.0	J003K1EB1A03	24.7	68.7	33.6	93.6	-	-	58.5	162.3	67.5	187.5	-	-	-	-	76.5	212.4	-	-	46.2	118.5
3	5.0	J005K1EA1A03	-	-	-	-	75	208	-	-	-	-	150	416	165	458	-	-	90	250	-	-
3	5.0	J005K1EB1A03	41.2	115	56.2	156	-	-	97.5	271	112	312	-	-	-	-	127	354	-	-	71.2	198
3	7.5	J7X5K1EA1A03	-	-	-	-	112	312	-	-	-	-	225	624	274	687	-	-	135	375	-	-
3	7.5	J7X5K1EB1A03	61.9	172	84.4	234	-	-	146	406	168	468	-	-	-	-	190	531	-	-	107	293
Connection Diagram			P	N	N	O	M	M	M	M	M	M	M	M	M	M	M	M	N	N	N	N

DIAGRAM "M"

High Voltage

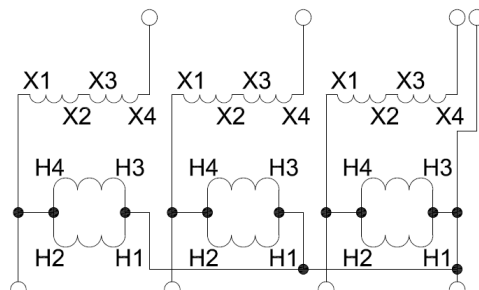


Low Voltage

Neutral

DIAGRAM "N"

High Voltage

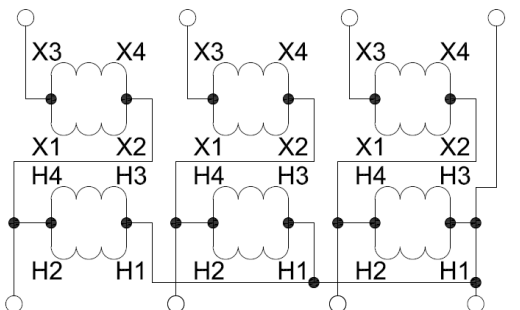


Low Voltage

Neutral

DIAGRAM "O"

Low Voltage

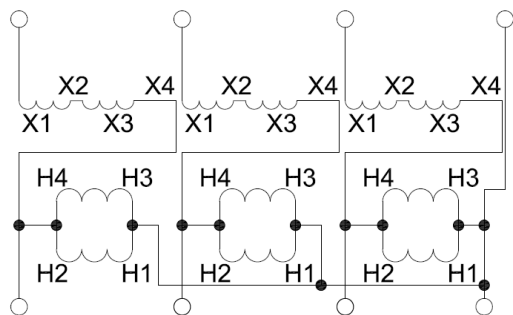


High Voltage

Neutral

DIAGRAM "P"

Low Voltage



High Voltage

Neutral

Need Three Phase Wye 230 Volts, 60Hz (Selection Table Number 8)

Units Req'd	Unit Kva	Use Catalog Number	Have Available Voltage Of																			
			183		192		199		208		218		241		245		253		260		265	
			Max load																			
Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		
3	.05	J050A1EA1A01	-	-	.083	2.08	-	-	0.54	1.35	-	-	1.66	4.17	1.74	4.37	-	-	0.91	2.29	-	-
3	.05	J050A1EB1A01	0.62	1.56	-	-	0.54	1.35	-	-	-	-	-	-	1.33	3.33	-	-	0.70	1.77	0.62	1.56
3	.10	J100A1EA1A01	-	-	1.66	4.17	-	-	3.30	9.17	3.32	8.35	3.48	8.75	-	-	1.83	4.58	-	-	-	-
3	.10	J100A1EB1A01	1.25	3.12	-	-	1.08	2.71	-	-	-	-	-	-	2.65	6.67	-	-	1.41	3.54	1.25	3.12
3	.15	J150A1EA1A01	-	-	2.49	6.25	-	-	4.95	13.7	4.98	12.5	5.23	13.1	-	-	2.74	6.87	-	-	-	-
3	.15	J150A1EB1A01	1.87	4.69	-	-	1.62	4.06	-	-	-	-	-	-	3.98	10	-	-	2.12	5.31	1.87	4.69
3	.25	J250A1EA1A02	-	-	4.15	10.4	-	-	8.20	22.9	8.30	20.9	8.71	21.9	-	-	4.56	11.5	-	-	-	-
3	.25	J250A1EB1A02	3.11	7.81	-	-	2.70	6.77	-	-	-	-	-	-	6.63	16.7	-	-	3.52	8.85	3.11	7.81
3	.50	J500A1EA1A02	-	-	8.30	20.8	-	-	16.5	45.8	16.6	41.7	17.4	43.7	-	-	9.31	22.9	-	-	-	-
3	.50	J500A1EB1A02	6.22	15.6	-	-	5.39	13.5	-	-	-	-	-	-	13.3	33.3	-	-	7.05	17.7	6.22	15.6
3	.75	J750A1EA1A02	-	-	12.4	31.2	-	-	24.7	68.8	24.9	62.6	26.1	65.5	-	-	13.7	34.4	-	-	-	-
3	.75	J750A1EB1A02	9.33	23.4	-	-	8.09	20.3	-	-	-	-	-	-	19.9	50	-	-	10.6	26.6	9.33	23.4
3	1.0	J001K1EA1A02	-	-	16.6	41.7	-	-	33	91.7	33.2	83.5	34.8	87.5	-	-	18.3	45.8	-	-	-	-
3	1.0	J001K1EB1A02	12.5	31.2	-	-	10.8	27.1	-	-	-	-	-	-	26.5	66.7	-	-	14.1	35.4	12.5	31.2
3	1.5	J1X5K1EA1A02	-	-	24.9	62.5	-	-	49.5	137	49.8	125	52.3	131	-	-	27.4	68.7	-	-	-	-
3	1.5	J1X5K1EB1A02	18.7	46.9	-	-	16.2	40.6	-	-	-	-	-	-	39.8	100	-	-	21.2	53.1	18.7	46.9
3	2.0	J002K1EA1A02	-	-	33.2	83.3	-	-	66	183	66.4	167	69.7	175	-	-	36.6	91.6	-	-	-	-
3	2.0	J002K1EB1A02	24.9	62.5	-	-	21.6	54.2	-	-	-	-	-	-	53.1	133	-	-	28.2	70.8	24.9	62.5
3	3.0	J003K1EA1A03	-	-	49.8	125.1	-	-	99	275	99.6	250.5	104.4	262.5	-	-	54.9	137.4	-	-	-	-
3	3.0	J003K1EB1A03	37.5	93.6	-	-	32.4	81.3	-	-	-	-	-	-	79.5	200	-	-	42.3	106.2	37.5	93.6
3	5.0	J005K1EA1A03	-	-	83	208	-	-	165	458	166	417	174	437	-	-	91.3	229	-	-	-	-
3	5.0	J005K1EB1A03	62.2	156	-	-	53.9	135	-	-	-	-	-	-	133	333	-	-	70.5	177	62.2	156
3	7.5	J7X5K1EA1A03	-	-	124	312	-	-	247	688	249	626	261	656	-	-	137	344	-	-	-	-
3	7.5	J7X5K1EB1A03	93.3	234	-	-	80.9	203	-	-	-	-	-	-	199	500	-	-	106	266	93.3	234
Connection Diagram			N	N	S	M	Q	Q	Q	Q	R	R	R	S								

Need Three Phase Wye 240 Volts, 60Hz (Selection Table Number 9)

Units Req'd	Unit Kva	Use Catalog Number	Have Available Voltage Of																			
			190		200		208		218		228		252		256		264		272		277	
			Max Load																			
Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		
3	.05	J050A1EA1A01	-	-	0.86	2.08	-	-	0.86	2.08	1.73	4.17	1.85	4.37	-	-	0.95	2.29	-	-	-	-
3	.05	J050A1EB1A01	0.65	1.65	-	-	1.27	3.05	-	-	-	-	-	-	1.39	3.33	-	-	0.74	1.77	0.65	1.56
3	.10	J100A1EA1A01	-	-	1.73	4.17	-	-	1.73	4.17	3.46	8.34	3.64	8.75	-	-	1.91	4.58	-	-	-	-
3	.10	J100A1EB1A01	1.30	3.12	-	-	2.55	6.12	-	-	-	-	-	-	2.77	6.67	-	-	1.47	3.54	1.30	3.12
3	.15	J150A1EA1A01	-	-	2.59	6.25	-	-	2.59	6.25	5.20	12.50	5.46	13.10	-	-	2.86	6.87	-	-	-	-
3	.15	J150A1EB1A01	1.95	4.69	-	-	3.82	9.16	-	-	-	-	-	-	4.16	10	-	-	2.21	5.31	1.95	4.69
3	.25	J250A1EA1A02	-	-	4.32	10.40	-	-	4.32	10.40	8.66	20.90	9.09	21.90	-	-	4.76	11.50	-	-	-	-
3	.25	J250A1EB1A02	3.25	7.81	-	-	6.30	15.10	-	-	-	-	-	-	6.93	16.70	-	-	3.68	8.85	3.25	7.81
3	.50	J500A1EA1A02	-	-	8.65	20.80	-	-	8.65	20.80	17.30	41.70	18.20	43.70	-	-	9.53	22.90	-	-	-	-
3	.50	J500A1EB1A02	6.50	15.60	-	-	12.70	30.40	-	-	-	-	-	-	13.90	33.30	-	-	7.36	17.70	6.50	15.60
3	.75	J750A1EA1A02	-	-	13.0	31.20	-	-	13.0	31.20	26.0	62.60	27.30	65.60	-	-	14.30	34.40	-	-	-	-
3	.75	J750A1EB1A02	9.75	23.40	-	-	19.2	46	-	-	-	-	-	-	20.8	50	-	-	11	26.6	9.75	23.40
3	1.0	J001K1EA1A02	-	-	17.3	41.7	-	-	17.3	41.7	34.6	83.4	36.4	87.5	-	-	19.1	45.8	-	-	-	-
3	1.0	J001K1EB1A02	13	31.2	-	-	25.5	61.2	-	-	-	-	-	-	27.7	66.7	-	-	14.7	35.4	13	31.2
3	1.5	J1X5K1EA1A02	-	-	25.9	62.5	-	-	25.9	62.5	52	125	54.6	131	-	-	28.6	68.7	-	-	-	-
3	1.5	J1X5K1EB1A02	19.5	46.9	-	-	38.2	91.6	-	-	-	-	-	-	41.6	100	-	-	22.1	53.1	19.5	46.9
3	2.0	J002K1EA1A02	-	-	34.6	83.3	-	-	34.6	83.3	69.3	167	72.8	175	-	-	38.1	91.7	-	-	-	-
3	2.0	J002K1EB1A02	26	62.5	-	-	51	122.4	-	-	-	-	-	-	55.4	133	-	-	29.5	70.8	26	62.5
3	3.0	J003K1EA1A03	-	-	51.9	125.1	-	-	51.9	125.1	103.8	250.2	109.2	262.5	-	-	57.3	137.4	-	-	-	-
3	3.0	J003K1EB1A03	39	93.6	-	-	76.5	183.6	-	-	-	-	-	-	83.1	200	-	-	44.1	106.2	39	93.6
3	5.0	J005K1EA1A03	-	-	86.5	208	-	-	86.5	208	173	417	182	437	-	-	95.3	229	-	-	-	-
3	5.0	J005K1EB1A03	65	156	-	-	127.2	305.2	-	-	-	-	-	-	139	333	-	-	73.6	177	65	156
3	7.5	J7X5K1EA1A03	-	-	130	312	-	-	130	312	260	626	273	656	-	-	143	344	-	-	-	-
3	7.5	J7X5K1EB1A03	97.5	234	-	-	192	460	-	-	-	-	-	-	208	500	-	-	110	266	97.5	234
Connection Diagram			N	N	M	R	Q	Q	Q	Q	R	R	R	S								

Need Three Phase Wye

460 Volts, 60Hz (Selection Table Number 10)

Need Three Phase Wye

480 Volts, 60Hz (Selection Table Number 11)

# Units	Unit Kva	Use Catalog Number	Have Available Voltage Of							# Units	Unit Kva	Use Catalog Number	Have Available Voltage Of						
			406		418		432		438				424		436		450		
			Max Load										Max Load						
Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps					
3	.05	J050A1EA1A01	-	-	1.66	2.08	-	-	3.22	4.04	3	.05	J050A1EA1A01	-	-	1.7	2.1	-	-
3	.05	J050A1EB1A01	1.25	1.57	-	-	2.49	3.12	-	-	3	.05	J050A1EB1A01	1.3	1.56	-	-	2.6	3.13
3	.10	J100A1EA1A01	-	-	3.31	4.15	-	-	6.62	8.31	3	.10	J100A1EA1A01	-	-	3.5	4.2	-	-
3	.10	J100A1EB1A01	2.49	3.12	-	-	4.97	6.24	-	-	3	.10	J100A1EB1A01	2.6	3.12	-	-	5.2	6.25
3	.15	J150A1EA1A01	-	-	4.97	6.24	-	-	9.94	12.48	3	.15	J150A1EA1A01	-	-	5.2	6.25	-	-
3	.15	J150A1EB1A01	3.73	4.68	-	-	7.46	9.36	-	-	3	.15	J150A1EB1A01	3.9	4.68	-	-	7.8	9.38
3	.25	J250A1EA1A02	-	-	8.28	10.39	-	-	16.6	20.84	3	.25	J250A1EA1A02	-	-	8.7	10.4	-	-
3	.25	J250A1EB1A02	6.22	7.81	-	-	12.4	15.56	-	-	3	.25	J250A1EB1A02	6.5	7.82	-	-	13	15.6
3	.50	J500A1EA1A02	-	-	16.6	20.84	-	-	33.2	41.67	3	.50	J500A1EA1A02	-	-	17.4	20.9	-	-
3	.50	J500A1EB1A02	12.5	15.69	-	-	24.69	31.25	-	-	3	.50	J500A1EB1A02	13	15.6	-	-	26	31.2
3	.75	J750A1EA1A02	-	-	24.8	31.12	-	-	49.6	62.25	3	.75	J750A1EA1A02	-	-	26	31.2	-	-
3	.75	J750A1EB1A02	18.7	23.47	-	-	37.3	46.82	-	-	3	.75	J750A1EB1A02	19.5	23.4	-	-	39	46.9
3	1.0	J001K1EA1A02	-	-	33.1	41.54	-	-	66.2	83.09	3	1.0	J001K1EA1A02	-	-	35	42	-	-
3	1.0	J001K1EB1A02	24.9	31.25	-	-	49.7	62.38	-	-	3	1.0	J001K1EB1A02	26	31.2	-	-	52	62.5
3	1.5	J1X5K1EA1A02	-	-	49.7	62.38	-	-	99.4	124.75	3	1.5	J1X5K1EA1A02	-	-	52	62.5	-	-
3	1.5	J1X5K1EB1A02	37.3	46.94	-	-	74.6	93.63	-	-	3	1.5	J1X5K1EB1A02	39	46.8	-	-	78	93.8
3	2.0	J002K1EA1A02	-	-	66.3	83.22	-	-	133	166.93	3	2.0	J002K1EA1A02	-	-	69	82.9	-	-
3	2.0	J002K1EB1A02	49.7	62.38	-	-	99.5	124.88	-	-	3	2.0	J002K1EB1A02	52	62.5	-	-	104	125
3	3.0	J003K1EA1A03	-	-	99.3	124.64	-	-	198.6	249.27	3	3.0	J003K1EA1A03	-	-	104	125	-	-
3	3.0	J003K1EB1A03	74.6	93.93	-	-	149	187.01	-	-	3	3.0	J003K1EB1A03	78	93.8	-	-	156	187.6
3	5.0	J005K1EA1A03	-	-	166	208.35	-	-	322	404.16	3	5.0	J005K1EA1A03	-	-	174	209.2	-	-
3	5.0	J005K1EB1A03	125	156.89	-	-	249	312.53	-	-	3	5.0	J005K1EB1A03	130	156.3	-	-	260	312.7
3	7.5	J7X5K1EA1A03	-	-	248	311	-	-	496	622	3	7.5	J7X5K1EA1A03	-	-	260	312	-	-
3	7.5	J7X5K1EB1A03	187	235	-	-	373	468	-	-	3	7.5	J7X5K1EB1A03	195	234	-	-	390	469
Connection Diagram			R		R		Q		Q				R		R		Q		

DIAGRAM "M"

High Voltage

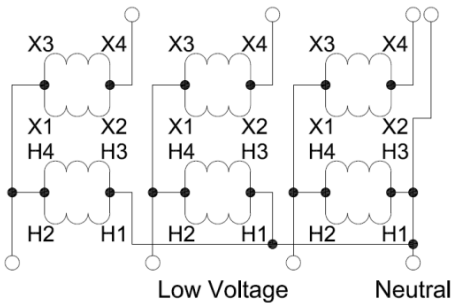


DIAGRAM "N"

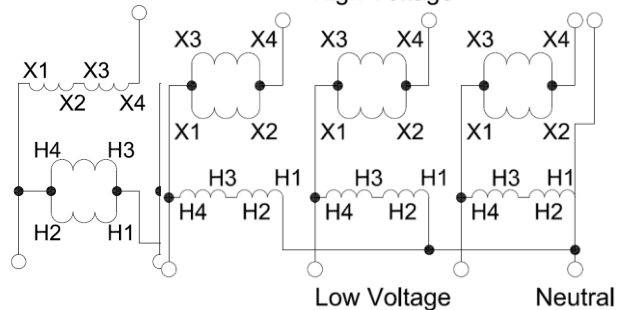


DIAGRAM "Q"

High Voltage

DIAGRAM "R"

High Voltage

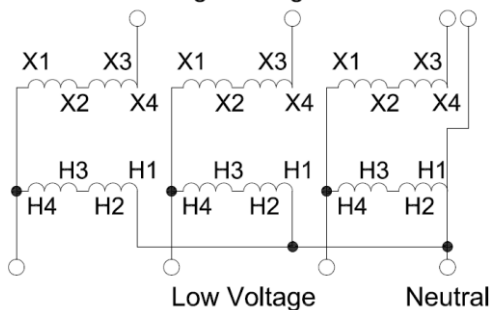
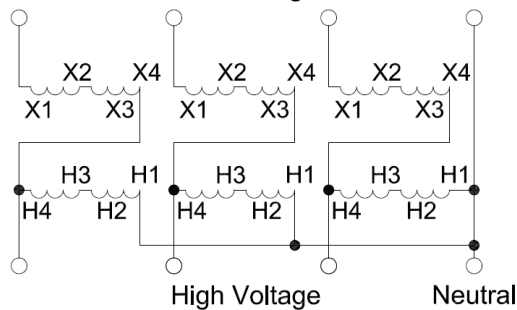


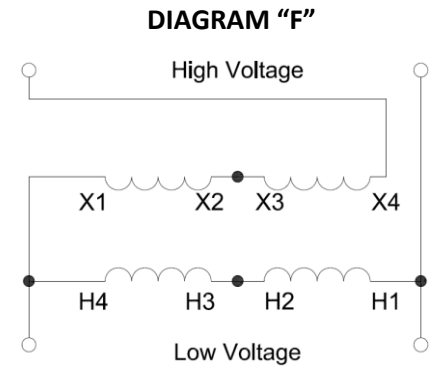
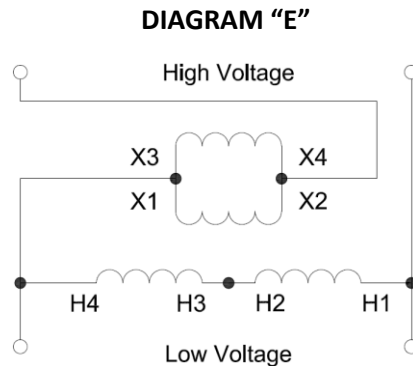
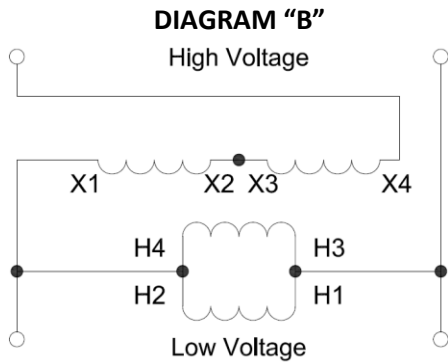
DIAGRAM "S"

Low Voltage



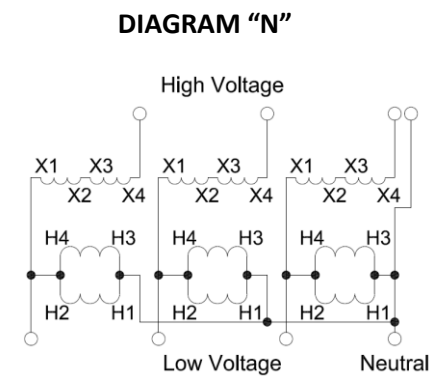
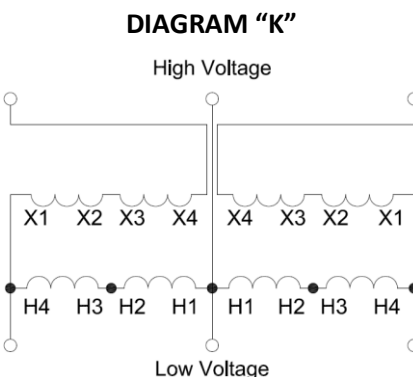
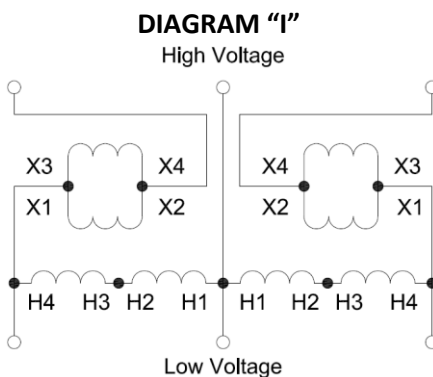
Single Phase Group "B" Applications, 60Hz (Selection Table Number 12)

# Units	Unit Kva	Use Catalog Number	Available Voltage/Output Voltage																							
			200/240		230/277		346/380		362/380		378/416		416/457		436/480		458/480		277/230		480/456		504/480		528/480	
			Max load																							
			Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps			
1	.25	J250A1KC1A02	1.25	5.2	1.44	5.2	1.98	5.2	3.95	10.4	2.16	5.2	2.38	5.2	2.5	5.2	4.99	10.4	1.44	6.26	5.23	11.4	5.47	11.4	2.75	5.72
1	.50	J500A1KC1A02	2.5	10.4	2.88	10.4	3.95	10.4	7.9	20.8	4.33	10.4	4.76	10.4	4.99	10.4	9.98	20.8	2.88	12.5	10.4	22.8	10.9	22.8	5.49	11.4
1	.75	J750A1KC1A02	3.75	15.6	4.32	15.6	5.93	15.6	11.9	31.2	6.49	15.6	7.14	15.6	7.49	15.6	15	31.2	4.33	18.8	15.7	34.2	16.4	34.2	8.24	17.2
1	1.0	J001K1KC1A02	5.0	20.8	5.76	20.8	7.9	20.8	15.8	41.6	8.65	20.8	9.52	20.8	9.98	20.8	20	41.6	5.76	25	20.9	45.6	21.8	45.6	11	22.9
1	1.5	J1X5K1KC1A02	7.5	31.2	8.64	31.2	11.9	31.2	23.8	62.5	13	31.2	14.3	31.2	15	31.2	30	62.5	8.64	37.6	31.3	68.4	32.8	68.4	16.5	34.3
1	2.0	J002K1KC1A02	10	41.6	11.5	41.6	15.8	41.6	31.6	83.3	17.3	41.6	19	41.6	20	41.6	40	83.3	11.5	50.1	41.8	91.2	43.7	91.2	22	45.8
1	3.0	J003K1KC1A03	15	62.5	17.3	62.5	23.8	62.5	47.5	125	26	62.5	28.6	62.5	30	62.5	60	125	17.3	75.3	62.7	136	65.2	136	33	68.8
1	5.0	J005K1KC1A03	25	104	28.8	104	39.5	104	79	208	43.3	104	47.6	104	49.9	104	99.8	208	28.8	125.3	104.5	227	108	227	54.9	114.4
1	7.5	J7X5K1KC1A03	37.5	156	43.2	156	59.3	156	118.6	312	64.9	156	71.4	156	74.9	156	149.8	312	43.2	187.9	156.8	341	163	341	82.4	171.6
Connection Diagram			B		B		F		E		F		F		F		E		B		E		E		F	



Three Phase Group "B" Applications, 60Hz (Selection Table Number 13)

Unit Kva	Use Catalog Number	Available Voltage/Output Voltage																	
		362/380		346/416		430/473		400/480		436/380		460/483		457/380		504/480		528/480	
		Max Load																	
		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps	
.25	J250A1KC1A02	6.52	10.4	3.75	5.2	4.26	5.2	4.33	5.2	4.33	5.2	8.7	10.4	4.12	6.25	9.08	10.9	4.76	5.72
.50	J500A1KC1A02	13.0	20.8	7.5	10.4	8.52	10.4	8.65	10.4	8.65	10.4	17.4	20.8	8.23	12.5	18.2	21.8	9.51	11.4
.75	J750A1KC1A02	19.6	31.2	11.2	15.6	12.8	15.6	13	15.6	13	15.6	26.1	31.2	12.3	18.8	27.2	32.8	14.3	17.2
1.0	J001K1KC1A02	26.1	41.6	15	20.8	17	20.8	17.3	20.8	17.3	20.8	34.8	41.6	16.5	25	36.3	43.7	19	22.9
1.5	J1X5K1KC1A02	39.1	62.4	22.5	31.2	25.5	31.2	26	31.2	26	31.2	52.2	62.4	24.7	37.5	54.5	65.5	28.5	34.3
2.0	J002K1KC1A02	52.2	83.2	30	41.6	34.1	41.6	34.6	41.6	34.6	41.6	69.6	83.2	32.9	50	72.6	87.4	38	45.8
3.0	J003K1KC1A03	78.4	125	45	62.5	51.2	62.5	52	62.5	52	62.5	104.6	125	49.5	75.2	109.7	131.3	57.2	68.8
5.0	J005K1KC1A03	130.4	208	75.1	104	85.2	104	86.6	104	86.6	104	174	208	82.3	125.1	181.6	218.4	95.1	114.4
7.5	J7X5K1KC1A03	195.6	312	112.6	156	127.8	156	129.9	156	129.9	156	261	312	123.5	187.6	272.4	327.6	142.7	171.6
Connection Diagram		I		N		K		N		K		I		N		I		K	
Units Required		2		3		2		3		2		2		3		2		2	



**Need Three Phase Open Delta 480 Volts,
60Hz (Selection Table Number 14)**

**Need Single Phase 480 Volts, 60Hz
(Selection Table Number 15)**

Units Req'd	Use Catalog Number	Have Available Volts Of					
		600		575		575	
		Max Load					
		Kva-Amps		Kva-Amps		Kva-Amps	
2	G500A1KF1A02	4.3	5.1	-	-	-	-
2	G001K1RF8A02	-	-	-	-	4.1	4.9
2	G750A1KF1A02	6.5	7.8	-	-	-	-
2	G001K1RF8A02	-	-	-	-	6.2	7.4
2	G001K1KF1A02	8.6	10.3	-	-	-	-
2	G001K1RF8A02	-	-	-	-	8.3	9.9
2	G1X5K1KF1A02	13	15.6	-	-	-	-
2	G1X5K1RF8A02	-	-	-	-	12.4	14.9
2	G002K1KF1A02	17.2	20.6	-	-	-	-
2	G002K1RF8A02	-	-	-	-	16.5	19.8
2	G003K1KF7A03	25.8	31	-	-	-	-
2	G003K1RF8A03	-	-	-	-	24.8	29.8
2	G005K1KF7A03	43.2	51.9	-	-	-	-
2	G005K1RF8A03	-	-	-	-	41	49.3
2	G7X5K1KF7A03	65	78.1	-	-	-	-
2	G7X5K1RF8A03	-	-	-	-	62	74.5
2	G010K1KF7A03	86	103.4	-	-	-	-
2	G010K1RF8A03	-	-	83	99.8	-	-
2	G015K1KF6A03	130	156.3	-	-	-	-
2	G015K1RF8A03	-	-	124	149.1	-	-
Connection Diagram		I	J	T			

Units Req'd	Use Catalog Number	Have Available Volts Of					
		600		575		575	
		Max Load					
		Kva-Amps		Kva-Amps		Kva-Amps	
1	G500A1KF1A02	2.5	5.2	-	-	-	-
1	G001K1RF8A02	-	-	-	-	2.4	5.0
1	G750A1KF1A02	3.7	7.7	-	-	-	-
1	G001K1RF8A02	-	-	-	-	3.6	7.5
1	G001K1KF1A02	5.0	10.4	-	-	-	-
1	G001K1RF8A02	-	-	-	-	4.8	10
1	G1X5K1KF1A02	7.5	15.6	-	-	-	-
1	G1X5K1RF8A02	-	-	-	-	7.2	15
1	G002K1KF1A02	10	20.8	-	-	-	-
1	G002K1RF8A02	-	-	-	-	9.6	20
1	G003K1KF7A03	15	31.2	-	-	-	-
1	G003K1RF8A03	-	-	-	-	14.3	29.7
1	G005K1KF7A03	25	52	-	-	-	-
1	G005K1RF8A03	-	-	-	-	24	50
1	G7X5K1KF7A03	37.5	78.1	-	-	-	-
1	G7X5K1RF8A03	-	-	-	-	36	75
1	G010K1KF7A03	50	104.1	-	-	-	-
1	G010K1RF8A03	-	-	48	100	-	-
1	G015K1KF6A03	75	156.2	-	-	-	-
1	G015K1RF8A03	-	-	72	150	-	-
Connection Diagram		E	H	U			

DIAGRAM "I"

High Voltage

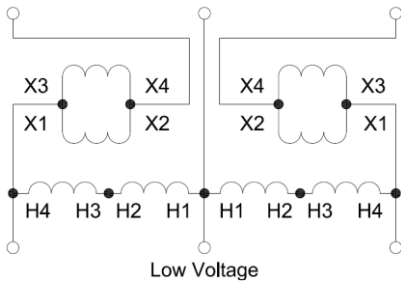


DIAGRAM "J"

High Voltage

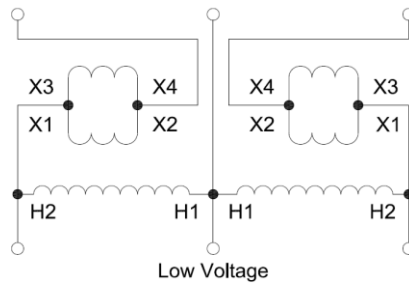


DIAGRAM "T"

High Voltage

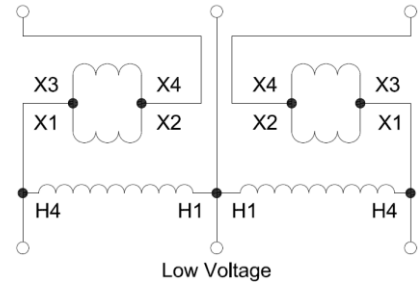


DIAGRAM "E"

High Voltage

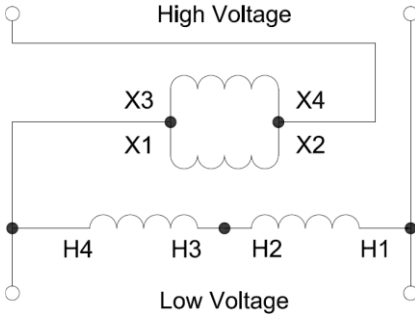


DIAGRAM "H"

High Voltage

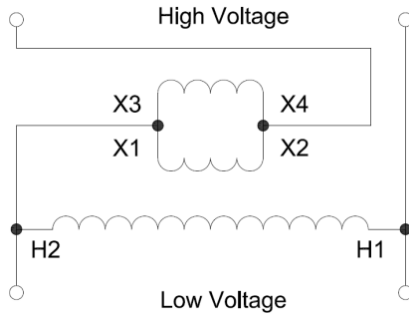


DIAGRAM "U"

High Voltage

