Why Use Buck-Boost Transformers?

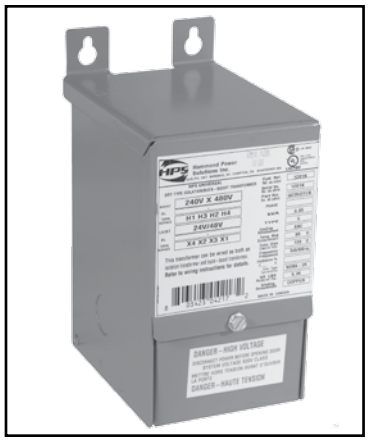
The advantages of using a buck-boost transformer over an equivalent standard isolation transformer are:

Advantages

1. Used in a variety of applications
2. Inexpensive and stocked voltage correction
3. Smaller and lighter than an isolation transformer

Disadvantages

1. No circuit isolation
2. Cannot create a neutral
3. KVA and voltages do not match what's on the nameplate kVA and voltages.



Buck-Boost Application

Buck-boost transformers offer an economical solution to the adjustment of line voltages that are slightly above or below normal. When a buck-boost transformer is connected as an autotransformer, only a portion of the load kVA is actually transformed. The majority of the load kVA is passed directly through to the source. For this reason a buck-boost transformer may be used to supply a much larger kVA load than is indicated on the nameplate.

Buck-boost transformers can be used to adjust stable voltages only.

BUCK-BOOST STANDARD SPECIFICATIONS

	50 to 1000 VA	1500 to 5000 VA
UL Listed	File: E50394	File: E50394
CSA Certified	File: LR3902	File: LR3902
Frequency	50/60 Hz	50/60 Hz
Insulation System	130°C (80°C rise)	180°C (115°C rise)
Standard Design	Single phase, welded core construction made with high quality, high permeability silicon steel laminations. Computer designed coils, accurately wound from high quality copper magnetic wire.	Single phase, welded core construction made with high quality, high permeability silicon steel laminations. Computer designed coils, accurately wound from high quality copper magnetic wire.
Encapsulation	All units from 50VA to 5kVA are encapsulated with electrical grade silica sand and resin compounds.	All units from 50VA to 5kVA are encapsulated with electrical grade silica sand and resin compounds.
Enclosure Type	Heavy Duty Type 3R (optional Type 4, 4X and 12 available)	Heavy Duty Type 3R (optional Type 4, 4X and 12 available)
Enclosure Finish	ANSI 61 Grey, UL50	ANSI 61 Grey, UL50
Termination	Front accessible separate high and low voltage lead wires or copper tabs.	Front accessible separate high and low voltage lead wires or copper tabs.
Conduit Knock-Outs	Side and rear standard on all units (no knock-outs on Stainless Steel enclosures).	Side and rear standard on all units (no knock-outs on Stainless Steel enclosures).
Mounting	Standard Wall Mounting.	Standard Wall Mounting.

Voltage Is the Key

Buck-boost transformers represent an economical way to both raise supply voltage caused by line drop or equipment demand on the distribution system, or lower voltage caused by increased system voltages due to supply line adjustments. Some loads including lighting and resistive loads require a stable supply to maintain performance. The detrimental effects of incorrect supply line voltage can cause equipment failure. Buck-boost transformers can correct line voltage within 5 to 25% of nominal.

Steps for Selecting Buck-Boost Transformers

The following information is required before selecting a buck-boost transformer:

1. Line Voltage - The voltage that you want to buck (decrease) or boost (increase). This can be determined by measuring the supply line voltage with a voltmeter.
2. Load Voltage - The voltage at which your equipment is designed to operate. This is listed on the nameplate of the load equipment.
3. Load kVA or Load Amps - You do not need to know both - one or the other is sufficient. This information usually can be found on the nameplate of the equipment that you want to operate. It is the sum of all the equipment that represents the load.
4. Frequency - The supply line frequency must be the same as the equipment to be operated - either 50 or 60 Hertz.
5. Phase - The supply line should be the same as the load - either single or three phase.

Four Steps to Select the Correct Buck-Boost Transformer

1. From the top row of each “Selection Chart”, select a ‘high voltage’ and ‘low voltage’ combination that is the closest to matching the high voltage and low voltage correction that is required for your application.
2. Move down that column to the kVA or current rating equal to, or greater than, the rating required by the total load. It is not likely that the exact value of the load will be found, so go to the next higher rating.
3. From the far left column, select the corresponding catalog number of the exact buck-boost transformer required. Refer to specification tables for dimensional information.
4. Connect the transformer in accordance with the connection diagram referenced at the bottom of the same column where you selected your high voltage and low voltage combination. Connection diagrams are on pages 90 to 92 in this catalog section. They are also packaged with each transformer.

How to use the Selection Chart

1. From the top row of the "Selection Chart" locate the high and low voltage combination that is closest to the one you require.
2. Move down that column to the kVA or Ampere rating equal to or greater than the rating required by the load.
3. From the far left column, obtain the transformer catalog number.
4. For dimensional information refer to the specifications table (Group B) on page 88.
5. The corresponding connection diagram is indicated at the bottom of the Voltage / kVA column. See page 90 for the connection diagrams.

Single Phase - Group B Selection Chart

Catalog Number	Low Voltage / High Voltage	95 / 120	101 / 115	106 / 120	110 / 125	110 / 139	115 / 130	115 / 146	120 / 136	120 / 152	203 / 230	208 / 236	220 / 235	220 / 249	230 / 261	240 / 256	240 / 272
QC05ESCB	HV Amps	1.56	3.13	3.13	3.13	1.56	3.13	1.56	3.13	1.56	1.56	1.56	3.13	1.56	1.56	3.13	1.56
	KVA	.188	.359	.375	.390	.218	.407	.228	.425	.238	.359	.368	.733	.390	.407	.800	.425
	LV Amps	1.98	3.54	3.54	3.54	1.98	3.54	1.98	3.54	1.98	1.77	1.77	3.33	1.77	1.77	3.33	1.77
QC10ESCB	HV Amps	3.12	6.25	6.25	6.25	3.12	6.25	3.12	6.25	3.12	3.12	3.12	6.25	3.12	3.12	6.25	3.12
	KVA	.376	.718	.751	.779	.435	.815	.455	.850	.475	.719	.737	1.47	.779	.815	1.60	.850
	LV Amps	3.96	7.08	7.08	7.08	3.96	7.08	3.96	7.08	3.96	3.54	3.54	6.67	3.54	3.54	6.67	3.54
QC15ESCB	HV Amps	4.69	9.38	9.38	9.38	4.69	9.38	4.69	9.38	4.69	4.69	4.69	9.38	4.69	4.69	9.38	4.69
	KVA	.564	1.07	1.13	1.17	.653	1.22	.683	1.28	.713	1.08	1.10	2.20	1.17	1.22	2.40	1.28
	LV Amps	5.94	10.6	10.6	10.6	5.94	10.6	5.94	10.6	5.94	5.31	5.31	10.0	5.31	5.31	10.0	5.31
QC20ESCB	HV Amps	6.25	12.5	12.5	12.5	6.25	12.5	6.25	12.5	6.25	6.25	6.25	12.5	6.25	6.25	12.5	6.25
	KVA	.752	1.43	1.50	1.56	0.871	1.63	0.91	1.70	.950	1.44	1.47	2.93	1.56	1.63	3.20	1.70
	LV Amps	7.92	14.2	14.2	14.2	7.92	14.2	7.92	14.2	7.92	7.08	7.08	13.3	7.08	7.08	13.3	7.08
QC25ESCB	HV Amps	7.81	15.6	15.6	15.6	7.81	15.6	7.81	15.6	7.81	7.81	7.81	15.6	7.81	7.81	15.6	7.81
	KVA	0.94	1.80	1.87	1.95	1.09	2.04	1.14	2.12	1.19	1.80	1.84	3.67	1.95	2.04	4.00	2.12
	LV Amps	9.90	17.7	17.7	17.7	9.87	17.7	9.90	17.7	9.90	8.85	8.85	16.7	8.85	8.85	16.7	8.85
QC35ESCB	HV Amps	10.9	21.9	21.9	21.9	10.9	21.9	10.9	21.9	10.9	10.9	10.9	21.9	10.9	10.9	21.9	10.9
	KVA	1.31	2.51	2.63	2.73	1.52	2.85	1.59	2.98	1.66	2.51	2.58	5.13	2.73	2.85	5.60	2.98
	LV Amps	13.9	24.8	24.8	24.8	13.9	24.8	13.9	24.8	13.9	12.4	12.4	23.3	12.4	12.4	23.3	12.4
QC50ESCB	HV Amps	15.6	31.2	31.2	31.2	15.6	31.2	15.6	31.2	15.6	15.6	15.6	31.2	15.6	15.6	31.2	15.6
	KVA	1.88	3.59	3.75	3.90	2.18	4.07	2.28	4.25	2.37	3.59	3.68	7.33	3.90	4.07	8.00	4.25
	LV Amps	19.8	35.4	35.4	35.4	19.8	35.4	19.8	35.4	19.8	17.7	17.7	33.3	17.7	17.7	33.3	17.7
QC75ESCB	HV Amps	23.4	46.8	46.8	46.9	23.4	46.9	23.4	46.9	23.4	23.4	23.4	46.9	23.4	23.4	46.9	23.4
	KVA	2.82	5.39	5.63	5.84	3.27	6.10	3.41	6.37	3.56	5.39	5.53	11.0	5.84	6.11	12.0	6.37
	LV Amps	29.7	53.1	53.1	53.1	29.7	53.1	29.7	53.1	29.7	26.6	26.6	50.0	26.6	26.6	50.0	26.6
Q1C0ESCB	HV Amps	31.2	62.5	62.5	62.5	31.2	62.5	31.2	62.5	31.2	31.2	31.2	62.5	31.2	31.2	62.5	31.2
	KVA	3.76	7.18	7.50	7.79	4.35	8.15	4.55	8.50	4.75	7.19	7.37	14.7	7.79	8.15	16.0	8.50
	LV Amps	39.6	70.8	70.8	70.8	39.6	70.8	39.6	70.8	39.6	35.4	35.4	66.7	35.4	35.4	66.7	35.4
Q1C5ESCF	HV Amps	46.9	93.7	93.7	93.7	46.9	93.7	46.9	93.7	46.9	46.9	46.8	93.7	46.9	46.9	93.7	46.9
	KVA	5.64	10.8	11.2	11.7	6.53	12.2	6.83	12.7	7.12	10.8	11.0	22.0	11.7	12.2	24.0	12.7
	LV Amps	59.4	106	106	106	59.4	106	59.4	106	59.4	53.1	53.1	100	53.1	53.1	100	53.1
Q002ESCF	HV Amps	62.5	125	125	125	62.5	125	62.5	125	62.5	62.5	62.5	125	62.5	62.5	125	62.5
	KVA	7.50	14.4	15.0	15.6	8.71	16.3	9.10	17.0	9.50	14.4	14.7	29.3	15.6	16.3	32.0	17.0
	LV Amps	79.1	142	142	142	79.2	142	79.2	142	79.2	70.8	70.8	133	70.8	70.8	133	70.8
Q003ESCF	HV Amps	93.7	187	187	187	93.7	187	93.7	187	93.7	93.7	93.7	187	93.7	93.7	187	93.7
	KVA	11.3	21.5	22.5	23.4	13.0	24.4	13.6	25.5	14.2	21.6	22.1	44.0	23.4	24.4	48.0	25.5
	LV Amps	119	212	212	212	119	212	119	212	119	106	106	200	106	106	200	106
Q005ESCF	HV Amps	156	312	312	312	156	312	156	312	156	156	156	312	156	156	313	156
	KVA	18.8	35.9	37.5	39.0	21.8	40.7	22.8	42.5	23.8	35.9	36.8	73.3	39.0	40.7	80.0	42.5
	LV Amps	198	354	354	354	198	354	198	354	198	177	177	333	177	177	333	177
CONNECTION DIAGRAM		2	1	1	1	2	1	2	1	2	4	4	3	4	4	3	4

How to use the Selection Chart

1. From the top row of the "Selection Chart" locate the high and low voltage combination that is closest to the one you require.
2. Determine the quantity you required.
3. The corresponding connection diagram is indicated at the top of the Voltage / kVA column. See page 91-92 for the connection diagrams.
4. Move down that column to the kVA or Ampere rating equal to or greater than the rating required by the load.
5. From the far left column, obtain the transformer catalog number.
6. For dimensional information refer to the specifications table (Group B) on page 89.

Three Phase - Group B Selection Chart

Catalog Number																
	Low Voltage	184	195	208	208	225	230	234	234	240	240	184	208	379	416	416
												106	120	219	240	240
	High Voltage	209	208	222	236	240	245	250	265	272	256	208	236	431	443	471
												120	136	249	256	272
QUANTITY REQUIRED		2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
CONNECTION DIAGRAM (Refer to Page 91-92)		7	8	8	7	8	8	8	7	7	8	10	10	12	11	12
Three Phase Connection Style		**Delta Connected**										**Wye Connected**				
QC05ESCB	**HV Amps**	1.56	3.13	3.13	1.56	3.13	3.13	3.13	1.56	1.56	3.13	3.13	3.13	1.56	3.13	1.56
	KVA	0.57	1.13	1.21	0.64	1.30	1.33	1.36	0.72	0.74	1.39	1.13	1.28	1.17	2.40	1.28
	LV Amps	1.77	3.33	3.33	1.77	3.33	3.33	3.33	1.77	1.77	3.33	3.54	3.54	1.77	3.33	1.77
QC10ESCB	**HV Amps**	3.13	6.25	6.25	3.13	6.25	6.25	6.25	3.13	3.13	6.25	6.25	6.25	3.13	6.25	3.13
	KVA	1.13	2.26	2.41	1.28	2.60	2.66	2.71	1.44	1.48	2.78	2.25	2.55	2.33	4.80	2.55
	LV Amps	3.54	6.67	6.67	3.54	6.67	6.67	6.67	3.54	3.54	6.67	7.08	7.08	3.54	6.67	3.54
QC15ESCB	**HV Amps**	4.69	9.38	9.38	4.69	9.38	9.38	9.38	4.69	4.69	9.38	9.38	9.38	4.69	9.4	4.69
	KVA	1.70	3.38	3.61	1.92	3.90	3.99	4.06	2.16	2.21	4.16	3.38	3.83	3.50	7.20	3.83
	LV Amps	5.31	10.00	10.00	5.31	10.00	10.00	10.00	5.31	5.31	10.00	10.6	10.6	5.31	10.0	5.31
QC20ESCB	**HV Amps**	6.25	12.50	12.50	6.25	12.50	12.50	12.50	6.25	6.25	12.50	12.5	12.5	6.25	12.50	6.25
	KVA	2.26	4.51	4.81	2.56	5.20	5.32	5.41	2.88	2.94	5.55	4.50	5.10	4.67	9.60	5.10
	LV Amps	7.08	13.30	13.30	7.08	13.30	13.30	13.30	7.08	7.08	13.30	14.2	14.2	7.08	13.3	7.08
QC25ESCB	**HV Amps**	7.81	15.60	15.60	7.80	15.60	15.60	15.60	7.81	7.81	15.60	15.6	15.6	7.81	15.6	7.81
	KVA	2.83	5.63	6.01	3.19	6.50	6.64	6.76	3.59	3.69	6.93	5.63	6.38	5.84	12.0	6.38
	LV Amps	8.85	16.70	16.70	8.90	16.70	16.70	16.70	8.85	8.85	16.70	17.7	17.7	8.85	16.7	8.85
QC35ESCB	**HV Amps**	10.9	21.9	21.9	10.9	21.9	21.9	21.9	10.9	10.9	21.9	21.9	21.9	10.9	21.9	10.9
	KVA	3.96	7.89	8.41	4.47	9.10	9.30	9.46	5.03	5.16	9.70	7.88	8.93	8.17	16.8	8.93
	LV Amps	12.4	23.3	23.3	12.4	23.3	23.3	23.3	12.4	12.4	23.3	24.8	24.8	12.4	23.3	12.4
QC50ESCB	**HV Amps**	15.6	31.3	31.3	15.6	31.3	31.3	31.3	15.6	15.6	31.3	31.3	31.3	15.6	31.3	15.6
	KVA	5.65	11.30	12.00	6.38	13.00	13.30	13.50	7.18	7.37	13.90	11.3	12.8	11.7	24.0	12.8
	LV Amps	17.7	33.3	33.3	17.7	33.3	33.3	33.3	17.7	17.7	33.3	35.4	35.4	17.7	33.3	17.7
QC75ESCB	**HV Amps**	23.4	46.9	46.9	23.4	46.9	46.9	46.9	23.4	23.4	46.9	46.9	46.9	23.4	46.9	23.4
	KVA	8.47	16.90	18.00	9.57	19.5	19.9	20.3	10.8	11.1	20.8	16.9	19.1	17.5	36.0	19.1
	LV Amps	26.6	50.0	50.0	26.6	50.0	50.0	50.0	26.6	26.6	50.0	53.1	53.1	26.6	50.0	26.6
Q1C0ESCB	**HV Amps**	31.3	62.5	62.5	31.3	62.5	62.5	62.5	31.3	31.3	62.5	62.5	62.5	31.3	62.5	31.3
	KVA	11.3	22.5	24.0	12.8	26.0	26.6	27.0	14.4	14.7	27.7	22.5	25.5	23.3	48.0	25.5
	LV Amps	35.4	66.7	66.7	35.4	66.7	66.7	66.7	35.4	35.4	66.7	70.8	70.8	35.4	66.7	35.4
Q1C5ESCF	**HV Amps**	46.9	93.8	93.8	46.9	93.8	93.8	93.8	46.9	46.9	93.8	93.8	93.8	46.9	93.8	46.9
	KVA	16.9	33.8	36.0	19.1	39.0	39.8	40.5	21.5	22.1	41.6	33.8	38.3	35.0	72.0	38.3
	LV Amps	53.1	100.0	100.0	53.1	100.0	100.0	100.0	53.1	53.1	100.0	106	106	53.1	100	53.1
Q002ESCF	**HV Amps**	62.5	125.0	125.0	62.5	125.0	125.0	125.0	62.5	62.5	125.0	125	125	62.5	125.0	62.5
	KVA	22.6	45.0	48.0	25.5	52.0	53.1	54.0	28.7	29.4	55.4	45.0	51.0	46.7	96.0	51.0
	LV Amps	70.8	133.3	133.3	70.8	133.3	133.3	133.3	70.8	70.8	133.3	142	142	70.8	133	70.8
Q003ESCF	**HV Amps**	93.75	187.5	187.5	93.75	187.5	187.5	187.5	93.75	93.75	187.5	188	188	93.8	188	93.8
	KVA	33.9	67.6	72.1	38.3	78.0	79.7	81.1	43.1	44.2	83.1	67.5	76.5	70.0	144	76.5
	LV Amps	106.3	200	200	106.3	200	200	200	106.3	106.3	200	213	213	106	200	106
Q005ESCF	**HV Amps**	156.25	312.5	312.5	156.25	313	312.5	312.5	156.25	156.25	312.5	313	313	156	313	156
	KVA	56.4	112.6	120.1	63.8	129.9	132.8	135.1	71.8	73.6	138.6	113	128	117	240	128
	LV Amps	177.1	333.3	333.3	177.1	333.3	333.3	333.3	177.1	177.1	333.3	354	354	177	333	177

Single Phase Specification Tables

Group A

Primary Voltage: 120 X 240
Secondary Voltage: 12 X 24 **50/60 Hertz**

VA	Catalog Number	Case Style (Page 228)	Approx. Dimensions (Inches) Width	Depth	Height	Approx. Weight (Lbs.)	Mtg Type W - Wall
50	**QC05ERCB**	NQ0	3.69	5.06	7.19	6	W
100	**QC10ERCB**	NQ0	3.69	5.06	7.19	7	W
150	**QC15ERCB**	NQ0	3.69	5.06	7.19	8	W
200	**QC20ERCB**	NQ1	4.31	5.56	7.19	11	W
250	**QC25ERCB**	NQ1	4.31	5.56	7.19	13	W
350	**QC35ERCB**	NQ1	4.31	5.56	7.19	14	W
500	**QC50ERCB**	NQ2	5.06	4.56	9.30	15	W
750	**QC75ERCB**	NQ2	5.06	4.56	9.30	18	W
1000	**Q1C0ERCB**	NQ3	5.88	5.19	10.56	25	W
1500	**Q1C5ERCF**	NQ4	7.06	6.25	11.75	36	W
2000	**Q002ERCF**	NQ4	7.06	6.25	11.75	46	W
3000	**Q003ERCF**	NQ5	10.00	7.75	17.25	65	W
5000	**Q005ERCF**	NQ5	10.00	7.75	17.25	105	W

Group B

Primary Voltage: 120 X 240
Secondary Voltage: 16 X 32 **50/60 Hertz**

VA	Catalog Number	Case Style (Page 228)	Approx. Dimensions (Inches) Width	Depth	Height	Approx. Weight (Lbs.)	Mtg Type W - Wall
50	**QC05ESCB**	NQ0	3.69	5.06	7.19	6	W
100	**QC10ESCB**	NQ0	3.69	5.06	7.19	7	W
150	**QC15ESCB**	NQ0	3.69	5.06	7.19	8	W
200	**QC20ESCB**	NQ1	4.31	5.56	7.19	11	W
250	**QC25ESCB**	NQ1	4.31	5.56	7.19	13	W
350	**QC35ESCB**	NQ1	4.31	5.56	7.19	14	W
500	**QC50ESCB**	NQ2	5.06	4.56	9.30	15	W
750	**QC75ESCB**	NQ2	5.06	4.56	9.30	18	W
1000	**Q1C0ESCB**	NQ3	5.88	5.19	10.56	25	W
1500	**Q1C5ESCF**	NQ4	7.06	6.25	11.75	36	W
2000	**Q002ESCF**	NQ4	7.06	6.25	11.75	46	W
3000	**Q003ESCF**	NQ5	10.00	7.75	17.25	65	W
5000	**Q005ESCF**	NQ5	10.00	7.75	17.25	105	W

Group C

Primary Voltage: 240 X 480
Secondary Voltage: 24 X 48 **50/60 Hertz**

VA	Catalog Number	Case Style (Page 228)	Approx. Dimensions (Inches) Width	Depth	Height	Approx. Weight (Lbs.)	Mtg Type W - Wall
50	**QC05DTCB**	NQ0	3.69	5.06	7.19	6	W
100	**QC10DTCB**	NQ0	3.69	5.06	7.19	7	W
150	**QC15DTCB**	NQ0	3.69	5.06	7.19	8	W
200	**QC20DTCB**	NQ1	4.31	5.56	7.19	11	W
250	**QC25DTCB**	NQ1	4.31	5.56	7.19	13	W
350	**QC35DTCB**	NQ1	4.31	5.56	7.19	14	W
500	**QC50DTCB**	NQ2	5.06	4.56	9.30	15	W
750	**QC75DTCB**	NQ2	5.06	4.56	9.30	18	W
1000	**Q1C0DTCB**	NQ3	5.88	5.19	10.56	25	W
1500	**Q1C5DTCF**	NQ4	7.06	6.25	11.75	36	W
2000	**Q002DTCF**	NQ4	7.06	6.25	11.75	46	W
3000	**Q003DTCF**	NQ5	10.00	7.75	17.25	65	W
5000	**Q005DTCF**	NQ5	10.00	7.75	17.25	105	W

Three Phase Specification Tables

Group A

Primary Voltage: 120 X 240
Secondary Voltage: 12 X 24 **50/60 Hertz**

VA	Catalog Number	Case Style (Page 228)	Approx. Dimensions (Inches) Width	Depth	Height	Approx. Weight (Lbs.)	Mtg Type W - Wall
50	QC05ERCB	NQ0	3.69	5.06	7.19	6	W
100	QC10ERCB	NQ0	3.69	5.06	7.19	7	W
150	QC15ERCB	NQ0	3.69	5.06	7.19	8	W
200	QC20ERCB	NQ1	4.31	5.56	7.19	11	W
250	QC25ERCB	NQ1	4.31	5.56	7.19	13	W
350	QC35ERCB	NQ1	4.31	5.56	7.19	14	W
500	QC50ERCB	NQ2	5.06	4.56	9.30	15	W
750	QC75ERCB	NQ2	5.06	4.56	9.30	18	W
1000	Q1C0ERCB	NQ3	5.88	5.19	10.56	25	W
1500	Q1C5ERCF	NQ4	7.06	6.25	11.75	36	W
2000	Q002ERCF	NQ4	7.06	6.25	11.75	46	W
3000	Q003ERCF	NQ5	10.00	7.75	17.25	65	W
5000	Q005ERCF	NQ5	10.00	7.75	17.25	105	W

Group B

Primary Voltage: 120 X 240
Secondary Voltage: 16 X 32 **50/60 Hertz**

VA	Catalog Number	Case Style (Page 228)	Approx. Dimensions (Inches) Width	Depth	Height	Approx. Weight (Lbs.)	Mtg Type W - Wall
50	QC05ESCB	NQ0	3.69	5.06	7.19	6	W
100	QC10ESCB	NQ0	3.69	5.06	7.19	7	W
150	QC15ESCB	NQ0	3.69	5.06	7.19	8	W
200	QC20ESCB	NQ1	4.31	5.56	7.19	11	W
250	QC25ESCB	NQ1	4.31	5.56	7.19	13	W
350	QC35ESCB	NQ1	4.31	5.56	7.19	14	W
500	QC50ESCB	NQ2	5.06	4.56	9.30	15	W
750	QC75ESCB	NQ2	5.06	4.56	9.30	18	W
1000	Q1C0ESCB	NQ3	5.88	5.19	10.56	25	W
1500	Q1C5ESCF	NQ4	7.06	6.25	11.75	36	W
2000	Q002ESCF	NQ4	7.06	6.25	11.75	46	W
3000	Q003ESCF	NQ5	10.00	7.75	17.25	65	W
5000	Q005ESCF	NQ5	10.00	7.75	17.25	105	W

Group C

Primary Voltage: 240 X 480
Secondary Voltage: 24 X 48 **50/60 Hertz**

VA	Catalog Number	Case Style (Page 228)	Approx. Dimensions (Inches) Width	Depth	Height	Approx. Weight (Lbs.)	Mtg Type W - Wall
50	QC05DTCB	NQ0	3.69	5.06	7.19	6	W
100	QC10DTCB	NQ0	3.69	5.06	7.19	7	W
150	QC15DTCB	NQ0	3.69	5.06	7.19	8	W
200	QC20DTCB	NQ1	4.31	5.56	7.19	11	W
250	QC25DTCB	NQ1	4.31	5.56	7.19	13	W
350	QC35DTCB	NQ1	4.31	5.56	7.19	14	W
500	QC50DTCB	NQ2	5.06	4.56	9.30	15	W
750	QC75DTCB	NQ2	5.06	4.56	9.30	18	W
1000	Q1C0DTCB	NQ3	5.88	5.19	10.56	25	W
1500	Q1C5DTCF	NQ4	7.06	6.25	11.75	36	W
2000	Q002DTCF	NQ4	7.06	6.25	11.75	46	W
3000	Q003DTCF	NQ5	10.00	7.75	17.25	65	W
5000	Q005DTCF	NQ5	10.00	7.75	17.25	105	W