

TRANSFORMER SIZING CHART								
KVA RATING	VOLTAGE		FEEDER			O.C.P.D. ( AMPS )		GROUNDING ELECTRODE ( AWG )
	PRIMARY	SECONDARY	PRIMARY	SECONDARY	K RATED SEC.	PRIMARY	SECONDARY	
15	480Δ	208Y/120	30A -N1G	50A 1N1G	50A 2N1G	20	50	8
30	480Δ	208Y/120	50A -N1G	100A 1N1G	100A 2N1G	45	100	6
45	480Δ	208Y/120	60A -N1G	150A 1N1G	150A 2N1G	60	150	4
75	480Δ	208Y/120	125A -N1G	250A 1N1G	250A 2N1G	110	250	2
112.5	480Δ	208Y/120	150A -N1G	400A 1N1G	400A 2N1G	150	350	1/0
150	480Δ	208Y/120	225A -N1G	500A 1N1G	500A 2N1G	225	500	2/0
225	480Δ	208Y/120	300A -N1G	700A 1N1G	700A 2N1G	300	700	3/0
300	480Δ	208Y/120	450A -N1G	1000A 1N1G	1000A 2N1G	450	1000	3/0
500	480Δ	208Y/120	700A -N1G	1600A 1N1G	1600A 2N1G	700	1600	3/0
750	480Δ	208Y/120	1000A -N1G	2500A 1N1G	2500A 2N1G	1000	2500	3/0

NOTES:

- ALL TRANSFORMERS LISTED ABOVE ARE THREE PHASE VENTILATED TYPE.
- PROVIDE MAIN O.C.P.D. ON PRIMARY AND SECONDARY SIDE OF EACH TRANSFORMER. CONNECT GROUNDING ELECTRODE CONDUCTOR TO NEAREST STRUCTURAL STEEL & TO NEAREST METALLIC COLD WATER PIPE, PER NEC.
- PROVIDE PRIMARY AND SECONDARY FEEDERS FOR TRANSFORMERS AS LISTED ABOVE.

POWER RISER DIAGRAM FEEDER SIZING CHART (SEE FEEDER LEGEND FOR APPLICATION OF THIS CHART)															
AMPERAGE	NUMBER OF PARALLEL SETS	PHASE CONDUCTOR(S)	NEUTRAL CONDUCTOR(S)		GROUNDING CONDUCTOR(S)		RACEWAY SIZE	AMPERAGE	NUMBER OF PARALLEL SETS	PHASE CONDUCTOR(S)	NEUTRAL CONDUCTOR(S)		GROUNDING CONDUCTOR(S)		RACEWAY SIZE
			STANDARD	OVERSIZED	EQUIPMENT	ISOLATED					STANDARD	OVERSIZED	EQUIPMENT	ISOLATED	
20 or 30	1	(3) # 10	(1) # 10	(1) # 8	(1) # 10	(1) # 10	1"	400	1	(3) # 500	(1) # 500	(2) # 350	(1) # 3	(1) # 3	4"
40 or 50	1	(3) # 8	(1) # 8	NA	(1) # 10	NA	1"	400	2	(3) # 4/0	(1) # 4/0	(2) # 1/0	(1) # 3	(1) # 3	3"
60	1	(3) # 6	(1) # 6	(1) # 3	(1) # 10	(1) # 10	1 1/4"	450	2	(3) # 4/0	(1) # 4/0	(2) # 2/0	(1) # 2	(1) # 2	3"
70	1	(3) # 4	(1) # 4	NA	(1) # 8	NA	1 1/4"	500	2	(3) # 250	(1) # 250	(2) # 3/0	(1) # 2	(1) # 2	3"
80	1	(3) # 4	(1) # 4	NA	(1) # 8	NA	1 1/4"	600	2	(3) # 350	(1) # 350	(2) # 4/0	(1) # 1	(1) # 1	4"
90	1	(3) # 3	(1) # 3	NA	(1) # 8	NA	1 1/2"	700	2	(3) # 500	(1) # 500	(2) # 300	(1) # 1/0	(1) # 1/0	4"
100	1	(3) # 2	(1) # 2	(1) # 1/0	(1) # 8	(1) # 8	1 1/2"	800	2	(3) # 500	(1) # 500	(2) # 350	(1) # 1/0	(1) # 1/0	4"
110	1	(3) # 2	(1) # 2	(1) # 2/0	(1) # 6	(1) # 6	2"	1000	3	(3) # 500	(1) # 500	N.A.	(1) # 2/0	N.A.	4"
125	1	(3) # 1	(1) # 1	(1) # 3/0	(1) # 6	(1) # 6	2"	1200	4	(3) # 500	(1) # 500	N.A.	(1) # 3/0	N.A.	4"
150	1	(3) # 1/0	(1) # 1/0	(1) # 4/0	(1) # 6	(1) # 6	2"	1600	5	(3) # 500	(1) # 500	N.A.	(1) # 4/0	N.A.	4"
175	1	(3) # 2/0	(1) # 2/0	(1) # 300	(1) # 6	(1) # 6	2 1/2"	2000	6	(3) # 500	(1) # 500	N.A.	(1) # 250	N.A.	4"
200	1	(3) # 3/0	(1) # 3/0	(2) # 1/0	(1) # 6	(1) # 6	2 1/2"	2500	7	(3) # 500	(1) # 500	N.A.	(1) # 350	N.A.	4"
225	1	(3) # 4/0	(1) # 4/0	(2) # 2/0	(1) # 4	(1) # 4	3"	3000	8	(3) # 500	(1) # 500	N.A.	(1) # 400	N.A.	4"
250	1	(3) # 250	(1) # 250	(2) # 3/0	(1) # 4	(1) # 4	3"	3200	9	(3) # 500	(1) # 500	N.A.	(1) # 500	N.A.	4"
300	1	(3) # 350	(1) # 350	(2) # 4/0	(1) # 4	(1) # 4	4"	3600	10	(3) # 500	(1) # 500	N.A.	(1) # 500	N.A.	4"
350	1	(3) # 400	(1) # 400	(2) # 300	(1) # 3	(1) # 3	4"	4000	11	(3) # 500	(1) # 500	N.A.	(1) # 500	N.A.	4"

NOTES:

- ALL CONDUCTORS LISTED ABOVE ARE THHN/THWN, COPPER.
- CONTRACTOR MAY ELECT TO INCREASE SIZE OF CONDUCTORS LISTED ABOVE IF THERE IS NO INCREASE IN COST. INCREASE SIZE OF RACEWAY PER CODE AS REQUIRED.
- PROVIDE AUXILIARY LUGS AND OVERSIZED GUTTERS IN DISTRIBUTION EQUIPMENT TO ACCOMMODATE OVERSIZED CONDUCTORS.

### TRANSFORMER LEGEND

IDENTIFICATION OF TRANSFORMER. TX-Kx

INDICATES K RATING. - = NO RATING K4 = K4 RATING K13 = K13 RATING

PROVIDE PRIMARY & SECONDARY FEEDERS AS SHOWN IN TX SIZING CHART BASED ON KVA INDICATED

GROUNDING ELECTRODE CONDUCTOR. PROVIDE CONDUCTOR AS SHOWN IN TX SIZING CHART BASED ON KVA INDICATED

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### PANELBOARD LEGEND

IDENTIFICATION OF PANELBOARD. TVSS IF INDICATED ON PANELBOARD INCORPORATES INTEGRAL TRANSIENT VOLTAGE SURGE SUPPRESSOR.

INTEGRAL OR REMOTE LOCATED O.C.P.D. AMPERAGE. (NOTE THAT BUSSING MAY BE HIGHER THAN THIS VALUE.)

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### FEEDER LEGEND

NOTE: SEE POWER RISER DIAGRAM FEEDER SIZING CHART FOR SIZE OF NEUTRAL AND GROUNDING CONDUCTORS BASED ON AMPERAGE OF FEEDER.

INDICATES QUANTITY OF NEUTRAL CONDUCTORS PER PARALLEL SET -N = NO NEUTRALS 1N = ONE STANDARD NEUTRAL 2N = OVERSIZED NEUTRAL

INDICATES QUANTITY OF GROUND CONDUCTORS PER PARALLEL SET. -G = NO GROUNDING CONDUCTORS 1G = ONE EQUIPMENT GROUNDING CONDUCTOR 2G = ONE EQUIPMENT GROUNDING CONDUCTOR AND ONE ISOLATED GROUND CONDUCTOR. FG = FULL SIZE GROUNDING CONDUCTOR. PROVIDE SAME SIZE AS PHASE CONDUCTOR.

EXAMPLE: (3) # 250 KCML. (250A) (1N1G) = (1) # 250 KCML NEUTRAL & (1) # 4 EQUIPMENT GROUNDING CONDUCTOR, ALL INSTALLED IN A 3" RACEWAY.