ABLE
EQUIPMENT RENTAL

AMP CHART

AMPS @ 0.8 POWER FACTOR

kVA	kW	208V	240V	380V	440V	480V	2400V	4160V	12470V	13200V	13800V	14400V
25	20	69	60	38	33	30	6	3.5				
44	35	121	105	66	57	52	10	6.0				
63	50	173	150	95	82	75	15	8.6				
81	65	225	195	123	106	97	19	11.2				
100	80	278	240	152	131	120	24	13.9				
125	100	347	301	190	164	150	30	17.5	5.7	5.4	5.2	5.0
156	125	433	375	237	205	188	37	21	7.2	6.8	6.5	6.2
219	175	608	527	332	289	263	52	30	10.1	9.5	9.1	8.7
250	200	694	601	380	328	301	60	34	11.5	10.9	10.4	10.0
312	250	868	751	475	410	376	75	43	14.4	13.6	13.0	12.5
375	300	1040	903	570	492	451	90	52	17.3	16.4	15.7	15.0
500	400	1389	1204	760	656	602	120	69	23.1	21.8	20.9	20.0
625	500	1735	1504	950	821	752	150	86	28.9	27.3	26.1	25.0
750	600	2084	1806	1140	985	903	180	104	34.7	32.8	31.4	30.1
937	750	2605	2257	1426	1231	1128	225	130	43.4	41.0	39.2	37.6
1125	900	3126	2709	1711	1477	1354	271	156	52.1	49.2	47.1	45.1
1250	1000	3473	3009	1901	1642	1505	301	173	57.9	54.7	52.3	50.1
1875	1500	5210	4515	2852	2463	2257	451	260	86.9	82.1	78.5	75.2
2188	1750	6079	5268	3327	2873	2634	526	303	101.3	95.7	91.6	87.8
2500	2000	6947	6020	3802	3284	3010	602	348	115.8	109.4	104.7	100.3
3130	2500	8684	7526	4753	4105	3763	752	434	144.8	136.8	130.8	125.4

ELECTRICAL FORMULAS FOR CALCULATING AMPERES, HORSEPOWER, KILOWATTS AND KVA

TO FIND	DIRECT CURRENT	ALTERNATING CURRENT		
		SINGLE PHASE	TWO PHASE-FOUR WIRE	THREE PHASE
AMPERES WHEN "HP" IS KNOWN	$\frac{HP \times 746}{E \times \%EFF}$	$\frac{HP \times 746}{E \times \%EFF \times PF}$	$\frac{HP \times 746}{E \times \%EFF \times PF \times 2}$	$\frac{HP \times 746}{E \times \%EFF \times PF \times 1.73}$
AMPERES WHEN "KW" IS KNOWN	$\frac{KW \times 1000}{E}$	$\frac{KW \times 1000}{E \times PF}$	$\frac{KW \times 1000}{E \times PF \times 2}$	$\frac{KW \times 1000}{E \times PF \times 1.73}$
AMPERES WHEN "KVA" IS KNOWN		$\frac{KVA \times 1000}{E}$	$\frac{KVA \times 1000}{E \times 2}$	$\frac{KVA \times 1000}{E \times 1.73}$
KILOWATTS	$\frac{E \times I}{1000}$	$\frac{E \times I \times PF}{1000}$	$\frac{E \times I \times PF \times 2}{1000}$	$\frac{E \times I \times PF \times 1.73}{1000}$
KILOVOLT-AMPERES "KVA"		$\frac{E \times I}{1000}$	$\frac{E \times I \times 2}{1000}$	$\frac{E \times I \times 1.73}{1000}$
HORSEPOWER	$\frac{E \times I \times \%EFF}{746}$	$\frac{E \times I \times \%EFF \times PF}{746}$	$\frac{E \times I \times \%EFF \times PF \times 2}{746}$	$\frac{E \times I \times \%EFF \times PF \times 1.73}{746}$

PERCENT EFFICIENCY = %EFF = $\frac{\text{OUTPUT (WATTS)}}{\text{INPUT (WATTS)}}$

POWER FACTOR = PF = $\frac{\text{POWER USED (WATTS)}}{\text{APPARENT POWER}} = \frac{KW}{KVA}$

NOTE: DIRECT CURRENT FORMULAS DO NOT USE (PF, 2, OR 1.73)
SINGLE PHASE FORMULAS DO NOT USE (2 OR 1.73)
TWO PHASE - FOUR WIRE FORMULAS DO NOT USE (1.73)
THREE PHASE FORMULAS DO NOT USE (2)

E = VOLTS
I = AMPERES
W = WATTS