AMPERAGE AND POWER FORMULAS

The data provided in this chart and by the formulas is for reference only and should not be used for installation purposes. For additional assistance, please use our sizing software program, PS-SPEC located on our website at www.mtuonsiteenergy.com, for detailed information or contact your MTU Onsite Energy Account Manager.

AMPERAGE CHART

Locate your power value in the left hand column of the chart and then move horizontally to the right and locate the amperage under the corresponding voltage and phase column.

Power Rating			Voltage				
kWe	**kVA (3Φ)**	**kVA (1Φ)**	**208 (3Φ)**	**240 (1Φ)**	**240 (3Φ)**	**480 (3Φ)**	**600 (3Φ)**
30	37.5	30	104	125	90	45	36
35	43.75	35	121	146	105	53	42
40	50	40	139	167	120	60	48
50	62.5	50	173	208	150	75	60
60	75	60	208	250	180	90	72
75	93.75	75	260	313	226	113	90
80	100	80	278	333	241	120	96
100	125	100	347	417	301	150	120
125	156.25	125	434	521	376	188	150
150	187.5	150	520	625	451	226	180
180	225	180	625	750	541	271	217
200	250	200	694	833	601	301	241
230	287.5	-	798	-	692	346	277
250	312.5	-	867	-	752	376	301
275	343.75	-	954	-	827	413	331
300	375	-	1,041	-	902	451	361
350	437.5	-	1,214	-	1,052	526	421
400	500	-	1,388	-	1,203	601	481
450	562.5	-	1,561	-	1,353	677	541
500	625	-	1,735	-	1,504	752	601
550	687.5	-	1,908	-	1,654	827	662
600	750	-	2,082	-	1,804	902	722
650	812.5	-	2,255	-	1,955	977	782
750	937.5	-	2,602	-	2,255	1,128	902
800	1,000	-	2,776	-	2,406	1,203	962
900	1,125	-	3,123	-	2,706	1,353	1,083
1,000	1,250	-	3,470	-	3,007	1,504	1,203
1,250	1,562.5	-	-	-	3,759	1,879	1,504

AMPERAGE AND POWER FORMULAS

AMPERAGE CHART, continued

Power Rating			Voltage				
kWe	**kVA (3Φ)**	**kVA (1Φ)**	**208 (3Φ)**	**240 (1Φ)**	**240 (3Φ)**	**480 (3Φ)**	**600 (3Φ)**
1,500	1,875	-	-	-	-	2,255	1,804
1,750	2,187.5	-	-	-	-	2,631	2,105
2,000	2,500	-	-	-	-	3,007	2,406
2,250	2,812.5	-	-	-	-	3,383	2,706
2,500	3,125	-	-	-	-	3,759	3,007
2,800	3,500	-	-	-	-	4,210	3,368
3,000	3,750	-	-	-	-	4,511	3,609
3,250	4,062.5	-	-	-	-	4,887	3,909

**Power Factor = 0.8

POWER FORMULAS

Unknown Value	Known Values	3 Phase (Φ) Formula	1 Phase (Φ) Formula
kW	Volts, Amps, Power Factor (PF)	$\frac{\text{Volts x Amps x 1.732 x PF}}{1000} = \text{kVa x PF}$	$\frac{\text{Volts x Amps x PF}}{1000} = \text{kVa x PF}$
kVA	Volts, Amps	$\frac{\text{Volts x Amps x 1.732}}{1000} = \frac{\text{kW}}{\text{PF}}$	$\frac{\text{Volts x Amps}}{1000} = \frac{\text{kW}}{\text{PF}}$
Amps (3Φ)	kW, Volts, Power Factor	$\frac{\text{kW x 1000}}{\text{Volts x 1.732 x PF}}$	$\frac{\text{kW x 1000}}{\text{Volts x PF}}$
Amps	kVA, Volts	$\frac{\text{kVA x 1000}}{\text{Volts x 1.732}}$	$\frac{\text{kVA x 1000}}{\text{Volts}}$
Frequency	RPM, Poles	$\frac{\text{RPM x Poles}}{120}$	$\frac{\text{RPM x Poles}}{120}$
Poles	Frequency, RPM	$\frac{\text{120 x Frequency}}{\text{RPM}}$	$\frac{\text{120 x Frequency}}{\text{RPM}}$
RPM	Frequency, Poles	$\frac{\text{120 x Frequency}}{\text{Poles}}$	$\frac{\text{120 x Frequency}}{\text{Poles}}$

**Power Factor = 0.8