

Cost of Compressed Air:

- I. 15% Fixed Charges: Compressed, Installation, Depreciation, Insurance, Repair.
- II. 15% Operating Charges: Attendance, Lubrication, Cooling-Water, Filters.
- III. 70% Power: Electric Motor Driven (both energy & demand) at \$.06/kw hr.

FACTS

- A. \$.20 per 1000 cubic feet at 100 psig: 200 hp = 1000 cfm X 60 minutes X 24 hrs. = \$288.00 per day.
- B. Rule of Thumb: Cost \$1.00 per HP per 24 hours at \$.06 per kw hour.
- C. Cost of Air Leakage 1/4" leak = 2,920,000 cubic feet per month = \$684.00.

Motor Size HP	Full Load Kva at 1800 RPM	Operatin Cost Per Year (8760 hours) at Stated Cost per kWh (\$)						
		.03	.04	.05	.06	.07	.08	.09
10	10.14	\$2,665	\$3,553	\$4,441	\$5,330	\$6,218	\$7,106	\$7,994
15	15.67	4,118	5,491	6,865	8,236	9,609	10,982	12,354
20	20.06	5,271	7,029	8,786	10,544	12,301	14,058	15,815
25	24.93	6,551	8,735	10,919	13,103	15,287	17,471	19,655
30	28.58	7,511	10,014	12,518	15,022	17,525	20,029	22,532
40	38.32	10,070	13,427	16,784	20,141	23,498	26,855	30,211
50	47.10	12,378	16,504	20,630	24,756	28,882	33,008	37,134
60	57.21	15,035	20,046	25,058	30,070	35,081	40,093	45,104
75	71.10	18,685	24,913	31,142	37,370	43,599	49,827	56,055
100	91.11	23,944	31,925	39,906	47,887	55,869	63,850	71,831
125	118.47	31,134	41,512	51,890	62,268	72,646	83,024	93,402
150	140.57	36,942	49,256	61,570	73,884	86,198	98,511	110,825
200	188.65	49,577	66,103	82,629	99,154	115,860	132,206	148,732

Full-Load Motor-Running Currents in Amperes Corresponding to Various AC HP Ratings

HP	110-220 Volts			220-240 Volts			440-480 Volts		
	Single Phase	Two Phase	Three Phase	Single Phase	Two Phase	Three Phase	Single Phase	Two Phase	Three Phase
1/10	3.0	***	***	1.5	***	***	***	***	***
1/8	3.8	***	***	1.9	***	***	***	***	***
1/6	4.4	***	***	2.2	***	***	***	***	***
1/4	5.8	***	***	2.9	***	***	***	***	***
1/3	7.2	***	***	3.6	***	***	***	***	***
1/2	9.8	4.0	4.0	4.9	2.0	2.0	2.5	1.0	1.0
3/4	13.8	4.8	5.6	6.9	2.4	2.8	3.5	1.2	1.4
1	16.0	6.4	7.2	8.0	3.2	3.6	4.0	1.6	1.8
1 1/2	20.0	9.0	10.4	10.0	4.5	5.2	5.0	2.3	2.6
2	24.0	11.8	13.6	12.0	5.9	6.8	6.0	3.0	3.4
3	34.0	16.6	19.9	17.0	8.3	9.6	8.5	4.2	4.8
5	56.0	26.4	30.4	28.0	13.2	15.2	14.0	6.6	7.6
7 1/2	80.0	38.0	44.0	40.0	19.0	22.0	21.0	9.0	11.0
10	100.0	48.0	56.0	50.0	24.0	28.0	23.0	12.0	14.0
15	135.0	72.0	84.0	68.0	36.0	42.0	34.0	18.0	21.0
20	***	94.0	108.0	88.0	47.0	54.0	44.0	23.0	27.0
25	***	118.0	136.0	110.0	59.0	68.0	55.0	29.0	34.0
30	***	138.0	160.0	136.0	69.0	80.0	68.0	35.0	40.0
40	***	180.0	208.0	176.0	90.0	104.0	88.0	45.0	52.0
50	***	226.0	260.0	216.0	113.0	130.0	108.0	56.0	65.0
60	***	***	***	***	133.0	154.0	***	67.0	77.0
75	***	***	***	***	166.0	192.0	***	83.0	96.0
100	***	***	***	***	218.0	248.0	***	109.0	124.0
125	***	***	***	***	***	312.0	***	135.0	156.0
150	***	***	***	***	***	360.0	***	156.0	180.0
200	***	***	***	***	***	480.0	***	208.0	240.0
250	***	***	***	***	***	602.0	***	***	302.0
300	***	***	***	***	***	***	***	***	361.0
350	***	***	***	***	***	***	***	***	414.0
400	***	***	***	***	***	***	***	***	477.0
500	***	***	***	***	***	***	***	***	590.0

* To obtain full-load currents for 200-208 volt motors, increase corresponding 220-240 volt rating by 15.