

CON-SERV MFG Full Load Currents

- 460 Volts, 230 Volts and 115 Volts motors- single and 3-phase

As a "rules of thumb" amps horsepower rating can be estimated as

- 115 Volts motor - single-phase : 14 amps/hp
- 230 Volts motor - single-phase : 7 amps/hp
- 230 Volts motor - 3-phase : 2.5 amps/hp
- 460 Volts motor - 3-phase : 1.25 amps/hp

Always check nameplate information before designing protective devices, wiring and switchgear.

Single-Phase Motors - HP and Full-Load Currents

Motor Size (hp)	Full Load Current (Amps)		
	115 V	208 V	230 V
1/6	4.4	2.4	2.2
1/4	5.8	3.2	2.9
1/3	7.2	4.0	3.6
1/2	9.8	5.4	4.9
3/4	13.8	7.6	6.9
1	16	8.8	8
1 1/2	20	11	10
2	24	13.2	12
3	34	18.7	17
5	56	30.8	28

Three-Phase Motors - HP and Full-Load Currents

Motor Size (hp)	Full-Load Current (Amps)								
	Induction Type				Synchronous Type				
	Squirrel-Cage and Wound Motor				Unity Power Factor				
	115 V	230 V	460 V	575 V	2300 V	230 V	460 V	575 V	2300 V
1/2	4	2	1	0.8					
3/4	5.6	2.8	1.4	1.1					
1	7.2	3.6	1.8	1.4					
1 1/2	10.4	5.2	2.6	2.1					
2	13.6	6.8	3.4	2.7					
3		9.6	4.8	3.9					
5		15.2	7.6	6.1					
7 1/2		22	11	9					
10		28	14	11					
15		42	21	17					
20		54	27	22					
25		68	34	27		53	26	21	
30		80	40	32		63	32	26	
40		104	52	41		83	41	33	
50		130	65	52		104	52	42	
60		154	77	62	16	123	61	49	12
75		192	96	77	20	155	78	62	15
100		248	124	99	26	202	101	81	20

Consult with the Con-Serv
Manufacturing Engineering
Staff to confirm Power
requirements

• 1 hp (English horse power) = 745.7 W = 0.746 kW = 550 ft lb/s = 2,545 Btu/h = 33,000 ft lb/m = 1.0139 metric horse power ≈ 1.0 KVA