

TM - NEMA CONTROL

Motor Full Load Current Data

The full load currents listed below are "average values" for motors of several manufacturers. These "average values" are as listed in the National Electrical Code 1996 and must only be used as a guide for selecting suitable branch circuit components.

The rated full load current shown on the motor nameplate is likely to vary from the values listed below .

The NAMEPLATE full load current should always be used in determining the rating of devices.

When using a design "E" Motor Special considerations apply. Refer to NEC 1996 tables 430-151A & B & 430-152, page 70-453/454.

B

FULL-LOAD MOTOR-RUNNING CURRENTS IN AMPERES CORRESPONDING TO VARIOUS A.C. HORSEPOWER RATINGS

Horse Power	115 Volts		230 Volts ^{1,2}		380 Volts		460 Volts		575 Volts		2.3 KV	4.16 KV
	Single Phase	Three Phase	Single Phase	Three Phase	Single Phase	Three Phase	Single Phase	Three Phase	Single Phase	Three Phase	Three Phase	Three H.P.
1/10	--	--	--	--	--	--	--	--	--	--	--	--
1/8	--	--	--	--	--	--	--	--	--	--	--	--
1/6	4.4	--	2.2	--	1.40	--	--	--	--	--	--	--
1/4	5.8	--	2.9	--	1.85	--	--	--	--	--	--	--
1/3	7.2	--	3.6	--	2.32	--	--	--	--	--	--	--
1/2	9.8	4.4	4.9	2.2	3.19	1.28	2.5	1.1	2.0	0.9	--	--
3/4	13.8	6.4	6.9	3.2	4.47	1.78	3.5	1.6	2.8	1.3	--	--
1	16.0	8.4	8.0	4.2	5.12	2.30	4.0	2.1	3.2	1.7	--	--
1.5	20.0	12.0	10.0	6.0	6.38	3.32	5.0	3.0	4.0	2.4	--	--
2	24.0	13.6	12.0	6.8	7.66	4.34	6.0	3.4	4.8	2.7	--	--
3	34.0	--	17.0	9.6	10.87	6.14	8.5	4.8	6.8	3.9	--	--
5	56.0	--	28.0	15.2	17.90	9.71	14.0	7.6	11.2	6.1	--	--
7.5	80.0	--	40.0	22.0	26.80	14.00	21.0	11.0	16.0	9.0	--	--
10	100.0	--	50.0	28.0	33.20	17.90	26.0	14.0	20.0	11.0	--	--
15	--	--	--	42.0	--	26.80	34.0	21.0	27.0	17.0	--	--
20	--	--	--	54.0	--	34.50	44.0	27.0	35.0	22.0	--	--
25	--	--	--	68.0	--	43.50	55.0	34.0	44.0	27.0	--	--
30	--	--	--	80.0	--	51.20	68.0	40.0	54.0	32.0	--	--
40	--	--	--	104.0	--	66.50	88.0	52.0	70.0	41.0	--	--
50	--	--	--	130.0	--	83.10	108.0	65.0	86.0	52.0	--	--
60	--	--	--	154.0	--	103.0	--	77.0	--	62.0	16.	9.
75	--	--	--	192.0	--	128.0	--	96.0	--	77.0	20.	11.
100	--	--	--	248.0	--	165.0	--	124.0	--	99.0	26.	14.3
125	--	--	--	312.0	--	208.0	--	156.0	--	125.0	31.	17.
150	--	--	--	360.0	--	240.0	--	180.0	--	144.0	37.	20.
200	--	--	--	480.0	--	320.0	--	240.0	--	192.0	49.	27.
250	--	--	--	--	--	403.0	--	302.0	--	242.0	60.	33.
300	--	--	--	--	--	482.0	--	361.0	--	289.0	72.	40.
350	--	--	--	--	--	560.0	--	414.0	--	336.0	83.	46.
400	--	--	--	--	--	636.0	--	477.0	--	382.0	95.	52.
500	--	--	--	--	--	786.0	--	590.0	--	472.0	118.	65.

NOTES:

1. To obtain F.L.C. for 200 and 208 Volt motors multiply 230 volts values by 1.15 and 1.10 respectively.
2. To obtain F.L.C. for 265 and 277 Volt motors multiply 230 Volt values by .87 and .83 respectively.