



How to Size a Contactor & Starter by Hp

Motor Application - Sizing & Selection by Hp



208V 3 Phase Motor

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable)
1/2	2.4	NC1D0910-V	LR-25-A04 (2.5-4 A)
3/4	3.5	NC1D0910-V	LR-25-A04 (2.5-4 A)
1	4.6	NC1D0910-V	LR-25-A06 (4-6 A)
1 1/2	6.6	NC1D0910-V	LR-25-A08 (5.5-8 A)
2	7.5	NC1D0910-V	LR-25-A08 (5.5-8 A)
3	10.6	NC1D1210-V	LR-25-A13 (9-13 A)
5	16.7	NC1D1810-V	LR-25-A18 (12-18 A)
7 1/2	24.2	NC1D2510-V	LR-36-A32 (23-32 A)
10	30.8	NC1D3210-V	LR-36-A32 (23-32 A)
15	46.2	NC1D5011-V	LR-93-A50 (37-50 A)
20	59.4	NC1D6511-V	LR-93-A65 (48-65 A)
25	74.8	NC1D8011-V	LR-93-A80 (63-80 A)
30	88	NC1D9511-V	LR-93-A93 (80-93 A)
40	114	F115-P3-V	LR-200-A160 (100-160A)
50	143	F150-P3-V	LR-200-A200 (125-200A)
60	169	F185-P3-V	LR-200-A200 (125-200A)
75	211	F265-P3-V	-

Insert the AC control coil voltage of 24, 120 or 240 (example: NC1D0910-V120)

230V 3 Phase Motor

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable)
1/2	2.2	NC1D0910-V	LR-25-A2x5 (1.6-2.5 A)
3/4	3.2	NC1D0910-V	LR-25-A04 (2.5-4 A)
1	4.2	NC1D0910-V	LR-25-A06 (4-6 A)
1 1/2	6.0	NC1D0910-V	LR-25-A08 (5.5-8 A)
2	6.8	NC1D0910-V	LR-25-A08 (5.5-8 A)
3	9.6	NC1D1210-V	LR-25-A13 (9-13 A)
5	15.2	NC1D1810-V	LR-25-A18 (12-18 A)
7 1/2	22	NC1D2510-V	LR-25-A25 (17-25 A)
10	28	NC1D3210-V	LR-36-A32 (23-32 A)
15	42	NC1D5011-V	LR-93-A50 (37-50 A)
20	54	NC1D6511-V	LR-93-A65 (48-65 A)
25	68	NC1D8011-V	LR-93-A80 (63-80 A)
30	80	NC1D9511-V	LR-93-A93 (80-93 A)
40	104	F115-P3-V	LR-200-A125 (80-125A)
50	130	F150-P3-V	LR-200-A160 (100-160A)
60	154	F185-P3-V	LR-200-A200 (125-200A)
75	192	F265-P3-V	LR-200-A200 (125-200A)

460V 3 Phase Motor

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable)
1/2	1.1	NC1D0910-V	LR-25-A1x6 (1-1.6 A)
3/4	1.6	NC1D0910-V	LR-25-2x5 (1.6-2.5 A)
1	2.1	NC1D0910-V	LR-25-A2x5 (1.6-2.5 A)
1 1/2	3.0	NC1D0910-V	LR-25-A04 (2.5-4 A)
2	3.4	NC1D0910-V	LR-25-A04 (2.5-4 A)
3	4.8	NC1D0910-V	LR-25-A06 (4-6 A)
5	7.6	NC1D0910-V	LR-25-A10 (7-10 A)
7 1/2	11	NC1D1210-V	LR-25-A13 (9-13 A)
10	14	NC1D1810-V	LR-25-A18 (12-18 A)
15	21	NC1D2510-V	LR-25-A25 (17-25 A)
20	27	NC1D3210-V	LR-36-A32 (23-32 A)
25	34	NC1D4011-V	LR-93-A40 (30-40 A)
30	40	NC1D5011-V	LR-93-A50 (37-50 A)
40	52	NC1D6511-V	LR-93-A65 (48-65A)
50	65	NC1D9511-V	LR-93-A80 (63-80A)
60	77	F115-P3-V	LR-200-A125 (80-125 A)
75	96	F115-P3-V	LR-200-A125 (80-125 A)
100	124	F150-P3-V	LR-200-A160 (100-160 A)
125	156	F265-P3-V	LR-200-A200 (125-200A)
150	180	F265-P3-V	LR-200-A200 (125-200A)

Insert the AC control coil voltage of 24, 120 or 240 (example: NC1D0910-V120)

115V Single Phase Motors

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable) ⁽¹⁾
1/2	9.8	NC1D1210-V	LR-25-A13 (9-13 A)
3/4	13.8	NC1D1810-V	LR-25-A18 (12-18 A)
1	16	NC1D1810-V	LR-25-A18 (12-18 A)
1 1/2	20	NC1D2510-V	LR-25-A25 (17-25 A)
2	24	NC1D3210-V	LR-36-A32 (23-32 A)
3	34	NC1D4011-V	LR-93-A40 (30-40 A)
5	56	NC1D6511-V	LR-93-A65 (48-65A)
7.5	80	NC1D9511-V	LR-93-A93 (80-93A)

Insert the AC control coil voltage

230V Single Phase Motors

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable) ⁽¹⁾
3/4	6.9	NC1D0910-V	LR-25-A08 (5.5-8 A)
1	8	NC1D0910-V	LR-25-A10 (7-10 A)
2	12	NC1D1810-V	LR-25-A18 (12-18 A)
3	17	NC1D2510-V	LR-25-A25 (17-25 A)
5	28	NC1D3210-V	LR-36-A32 (23-32 A)
7.5	40	NC1D5011-V	LR-93-A50 (37-50 A)
10	50	NC1D6511-V	LR-93-A65 (48-65A)

* 3 phase FLA values are based on NEC Table 430.250 (2020) for induction type squirrel cage & wound rotor motors. Single phase are based on NEC 430.248.

1) US Breaker LR overloads include single phase protection. For single phase motors, loop the 1st pole/phase back up and through the 2nd pole to balance the load.