

Typical recommended ratings of cables & protected devices

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3- Phase Capacitor kVar	Rated Current Per Phase (amps)	Minimum Copper Cable Size for 75oC Insulation	Recommended fuse amps Type Class RK5 (Time Delay)	Recommended Disconnect Switch Amps	Recommended MCCB Trip Amps
240 Volt					
2.5	6	#14	10	30	15
3.5	8.4	#14	15	30	15
5	12	#14	20	30	20
7.5	18	#12	30	30	30
10	24	#10	40	60	40
15	36	#6	60	60	60
20	48	#4	80	100	80
25	60	#4	100	100	90
30	72	#2	125	200	110
40	96	#1	175	200	150
50	120	1/0	200	200	200
60	144	2/0	250	400	225
75	180	250 kcmil	300	400	300
100	241	400 kcmil	400	400	400
125	301	(2) - 4/0	500	600	500
150	361	(2) - 250 kcmil	600	600	600
200	481	(2) - 400 kcmil	800	800	750
250	601	(3) - 300 kcmil	1000	1000	900
300	722	(3) - 400 kcmil	1200	1200	1100
480 Volt					
1.5	1.8	#14	3	30	15
2	1.8	#14	3	30	15
2.5	3	#14	6	30	15
3	3.6	#14	6	30	15
3.5	4.2	#14	10	30	15
4	4.8	#14	10	30	15
5	6	#14	10	30	15
6	7.2	#14	15	30	15
6.5	7.8	#14	15	30	15
7.5	9	#14	15	30	15
10	12	#14	20	30	20
15	18	#12	30	30	30
20	24	#10	40	60	40
25	30	#8	50	60	50
30	36	#6	60	60	60
35	42	#6	70	100	70
40	48	#4	80	100	80
45	54	#4	90	100	90
50	60	#4	100	100	90
60	72	#2	125	200	110
70	84	#1	150	200	150
75	90	#1	150	200	150
80	96	#1	175	200	150
90	108	1/0	200	200	175
100	120	2/0	200	200	200
150	180	250 kcmil	300	400	300
200	241	400 kcmil	400	400	400
250	301	(2) - 4/0	500	600	500
300	361	(2) - 250 kcmil	600	600	600
350	421	(2) - 300 kcmil	700	800	650
400	481	(2) - 400 kcmil	800	800	750
500	601	(3) - 300 kcmil	1000	1000	902

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3-Phase Capacitor kvar	Rated Current Per Phase (amps)	Minimum Copper Cable Size for 75oC Insulation	Recommended fuse amps Type RK5 (Time Delay)	Recommended Disc Switch Amps	Recommended MCCB Trip Amps
600 Volt					
2	2	#14	3	30	15
3	3	#14	6	30	15
4	4	#14	6	30	15
5	5	#14	10	30	15
7.5	7	#14	15	30	15
10	10	#14	20	30	15
15	14	#14	25	30	25
20	19	#10	35	60	30
25	24	#10	40	60	40
30	29	#8	50	60	50
35	34	#8	60	60	60
40	38	#6	70	100	60
45	43	#6	80	100	70
50	48	#4	80	100	80
60	58	#4	100	100	90
70	67	#2	125	200	110
80	77	#2	150	200	125
90	87	#1	150	200	150
100	96	#0	175	200	150
150	144	3/0	250	400	225
200	192	300 kcmil	350	400	300
250	241	400 kcmil	400	400	400
300	289	(2) - 3/0	500	600	450
350	337	(2) - 4/0	600	600	550
400	385	(2) - 300 kcmil	650	800	600
500	481	(2) - 400 kcmil	800	800	750

NOTE: Cable sizes are derived from Article 310, Table 310-16 of 2002 **NEC**®

The above table gives recommended ratings of cables, disconnect switches, and/or molded case circuit breakers for use with capacitor loads. For requirements not covered in the table, the following application guidelines may be used for capacitor switching duty:

- Power Cable Sizing 135% of Capacitor Current
- Disconnect Switch 165% of Capacitor Current
- Molded Case Circuit Breaker 135% of Capacitor Current

Note: For specific applications, refer to the NEC®.