

CABLE SELECTION

SINGLE PHASE TWO OR THREE WIRE CABLE, 60 HZ (SERVICE ENTRANCE TO MOTOR)

Motor Rating		AWG Copper Wire Size													
Volts	HP	14	12	10	8	6	4	3	2	1	0	00	000	0000	
115	1/3	130	210	340	540	840	1300	1610	1960	2390	2910	3540	4210	5060	
	1/2	100	160	250	390	620	960	1190	1460	1780	2160	2630	3140	3770	
230	1/3	550	880	1390	2190	3400	5250	6520	7960	9690	11770				
	1/2	400	650	1020	1610	2510	3880	4810	5880	7170	8720				
	3/4	300	480	760	1200	1870	2890	3580	4370	5330	6470	7870			
	1	250	400	630	990	1540	2380	2960	3610	4410	5360	6520			
	1-1/2	190	310	480	770	1200	1870	2320	2850	3500	4280	5240			
	2	150	250	390	620	970	1530	1910	2360	2930	3620	4480			
	3	120*	190	300	470	750	1190	1490	1850	2320	2890	3610			
	5	0	0	180*	280	450	710	890	1110	1390	1740	2170	2680		
	7-1/2	0	0	0	200*	310	490	610	750	930	1140	1410	1720		
	10	0	0	0	0	250*	390	490	600	750	930	1160	1430	1760	
	15	0	0	0	0	170*	270*	340	430	530	660	820	1020	1260	

1 Foot = .3048 Meter

THREE PHASE THREE WIRE CABLE, 60 HZ 200 AND 230 VOLTS (SERVICE ENTRANCE TO MOTOR)

Motor Rating		AWG Copper Wire Size													MCM Copper Wire Size					
Volts	HP	14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
200V 60Hz Three Phase Three Wire	1/2	710	1140	1800	2840	4420														
	3/4	510	810	1280	2030	3160														
	1	430	690	1080	1710	2670	4140	5140												
	1-1/2	310	500	790	1260	1960	3050	3780												
	2	240	390	610	970	1520	2360	2940	3610	4430	5420									
	3	180	290	470	740	1160	1810	2250	2760	3390	4130									
	5	110*	170	280	440	690	1080	1350	1660	2040	2490	3050	3670	4440	5030					
	7-1/2	0	0	200	310	490	770	960	1180	1450	1770	2170	2900	3150	3560					
	10	0	0	0	230*	370	570	720	880	1090	1330	1640	1970	2390	2720	3100	3480	3800	4420	
	15	0	0	0	160*	250*	390	490	600	740	910	1110	1340	1630	1850	2100	2350	2570	2980	
	20	0	0	0	0	190*	300*	380	460	570	700	860	1050	1270	1440	1650	1850	2020	2360	
	25	0	0	0	0	0	240*	300*	370*	460	570	700	840	1030	1170	1330	1500	1640	1900	
	30	0	0	0	0	0	0	250*	310*	380*	470	580	700	850	970	1110	1250	1360	1590	
	230V 60Hz Three Phase Three Wire	1/2	930	1490	2350	3700	5760	8910												
		3/4	670	1080	1700	2580	4190	6490	8060	9860										
1		560	910	1430	2260	3520	5460	6780	8290											
1-1/2		420	670	1060	1670	2610	4050	5030	6160	7530	9170									
2		320	510	810	1280	2010	3130	3890	4770	5860	7170	8780								
3		240	390	620	990	1540	2400	2980	3660	4480	5470	6690	8020	9680						
5		140*	230	370	590	920	1430	1790	2190	2690	3290	4030	4850	5870	6650	7560	8460	9220		
7-1/2		0	160*	260	420	650	1020	1270	1560	1920	2340	2870	3440	4160	4710	5340	5970	6500	7510	
10		0	0	190*	310	490	760	950	1170	1440	1760	2160	2610	3160	3590	4100	4600	5020	5840	
15		0	0	0	210*	330	520	650	800	980	1200	1470	1780	2150	2440	2780	3100	3400	3940	
20		0	0	0	0	250*	400	500	610	760	930	1140	1380	1680	1910	2180	2450	2680	3120	
25		0	0	0	0	0	320*	400	500	610	750	920	1120	1360	1540	1760	1980	2160	2520	
30		0	0	0	0	0	260*	330*	410*	510	620	760	930	1130	1280	1470	1650	1800	2110	
460V 60Hz Three Phase Three Wire		1/2	3770	6020	9460															
		3/4	2730	4350	6850															
	1	2300	3670	5770	9070															
	1-1/2	1700	2710	4270	6730															
	2	1300	2070	3270	5150	8050														
	3	1000	1600	2520	3970	6200														
	5	590	950	1500	2360	3700	5750													
	7-1/2	420	680	1070	1690	2640	4100	5100	6260	7680										
	10	310	500	790	1250	1960	3050	3800	4680	5750	7050									
	15	0	340*	540	850	1340	2090	2600	3200	3930	4810	5900	7110							
	20	0	0	410*	650	1030	1610	2000	2470	3040	3730	4580	5530							
	25	0	0	0	530*	830	1300	1620	1990	2450	3010	3700	4470	5430						
	30	0	0	0	430*	680	1070	1330	1640	2030	2490	3060	3700	4500	5130	5860				
	40	0	0	0	0	500*	790	980	1210	1490	1830	2250	2710	3290	3730	4250				
	50	0	0	0	0	0	640*	800	980	1210	1480	1810	2190	2650	3010	3420	3830	4180	4850	
	60	0	0	0	0	0	540*	670*	830*	1020	1250	1540	1850	2240	2540	2890	3240	3540	4100	
	75	0	0	0	0	0	0	0	680*	840*	1030	1260	1520	1850	2100	2400	2700	2950	3440	
	100	0	0	0	0	0	0	0	0	620*	760*	940*	1130	1380	1560	1790	2010	2190	2550	
	125	0	0	0	0	0	0	0	0	0	0	740*	890*	1000*	1220	1390	1560	1700	1960	
	150	0	0	0	0	0	0	0	0	0	0	0	760*	920	1050*	1190*	1340	1460	1690	
175	0	0	0	0	0	0	0	0	0	0	0	810	930*	1060*	1190*	1300	1510			
200	0	0	0	0	0	0	0	0	0	0	0	0	810*	920*	1030*	1130*	1310			

CAUTION Use of wire size smaller than listed will void warranty.

FOOTNOTES:

- (1) Lengths marked * meet the U.S. National Electrical Code ampacity only for individual conductor 60°C cable. Only the lengths without * meet the code for jacketed 60°C cable. Local code requirements may vary.
- (2) Maximum lengths shown maintain motor voltage at 95% of service entrance voltage, running at maximum nameplate amperes. If service entrance voltage will be at least motor nameplate voltage under normal load conditions, 50% additional length is permissible for all sizes.
- (3) This table is based on copper wire. If aluminum wire is used, it must be two sizes larger. Example: When the table calls for #12 copper wire, you would use #10 aluminum wire.
- (4) Single phase control boxes may be connected at any point of the total cable length.
- (5) Cable #14 to #0000 are AWG sizes.

