

Suggested Ampacities/Conversion

All Types of Insulations - Based on National Electric Code

COPPER				ALUMINUM			
No more than 3 conductors in raceway or cable		Single conductor in free air		No more than 3 conductors in raceway or cable		Single conductor in free air	

SIZE AWG OR MCM	CONDUCTOR TEMPERATURE RATING						CONDUCTOR TEMPERATURE RATING					
	85-90°C TEMP 185°F	110°C TEMP 230°F	85-90°C TEMP 185°F	110°C TEMP 230°F	125°C TEMP 257°F	200°C TEMP 392°F	85-90°C TEMP 185°F	110°C TEMP 230°F	85-90°C TEMP 185°F	110°C TEMP 230°F	125°C TEMP 257°F	200°C TEMP 392°F
AMPERES PER CONDUCTOR 100% LOAD FACTOR						AMPERES PER CONDUCTOR 100% LOAD FACTOR						
14	25	30	30	40	40	45	-	-	-	-	-	-
12	30	35	40	50	50	55	25	25	30	40	40	45
10	40	45	55	65	70	75	30	35	45	50	55	60
8	55	60	75	85	90	100	40	45	55	65	70	80
6	70	80	100	120	125	135	55	60	80	95	100	105
4	95	105	135	160	170	180	75	80	105	125	135	140
2	125	135	185	210	225	240	100	105	140	165	175	185
1	145	160	215	245	265	280	110	125	165	190	205	220
0	165	190	250	285	305	325	130	150	190	220	240	255
1/0	190	215	290	330	355	370	145	170	220	255	275	290
2/0	215	245	335	385	410	430	170	195	255	300	320	335
3/0	250	275	390	445	475	510	195	215	300	345	370	400
4/0	275	315	440	495	530	-	220	250	330	385	415	-
300	310	345	485	555	590	-	250	275	375	435	460	-
350	340	390	550	610	655	-	270	310	415	475	510	-
400	365	420	595	665	710	-	295	335	450	520	555	-
500	415	470	675	765	815	-	335	380	515	595	635	-
600	460	525	750	855	910	-	370	425	585	675	720	-
700	500	560	825	940	1005	-	405	455	646	745	795	-
750	515	580	855	980	1045	-	420	470	670	775	825	-
800	535	600	885	1020	1085	-	430	485	695	805	855	-
900	565	-	950	-	-	-	465	-	750	-	-	-
1000	590	680	1020	1165	1240	-	485	560	800	930	990	-

CORRECTION FACTORS FOR VARIOUS AMBIENT AIR TEMPERATURES*												
40°C	0.90	0.94	0.90	0.94	0.95	-	0.90	0.94	0.90	0.94	0.95	-
50°C	0.80	0.87	0.80	0.87	0.89	-	0.80	0.87	0.80	0.87	0.89	-
60°C	0.67	0.79	0.67	0.79	0.83	0.91	0.67	0.79	0.67	0.79	0.83	0.91
70°C	0.52	0.71	0.52	0.71	0.76	0.87	0.52	0.71	0.52	0.71	0.76	0.87
80°C	0.30	0.61	0.30	0.61	0.71	0.84	0.30	0.61	0.30	0.61	0.69	0.84
90°C	-	0.50	-	0.50	0.61	0.81	-	0.50	-	0.50	0.61	0.81
100°C	-	-	-	-	0.51	0.77	-	-	-	-	0.51	0.77
120°C	-	-	-	-	-	0.69	-	-	-	-	-	0.69
140°C	-	-	-	-	-	0.59	-	-	-	-	-	0.59

*Based on ambient temperature of 30°C (86°F)