Allowable Ampacities of Insulated Conductors

ALLOWABLE AMPACITIES OF INSULATED ALUMINUM OR COPPERCLAD ALUMINUM CONDUCTORS

- Rated Up to and Including 2000 Volts, 60°C through 90°C (140°F through 194°F).
- Not More Than Three Current-Carrying Conductors in Raceway, Cable, or Earth (Directly Buried).
- Based on Ambient Temperature of 30°C (86°F)

Conductor Size (AWG or kcmil)	60°C (140°F) TW, UF	75°C (167°F) RHW, THHW, THW, THWN, XHHW, USE, ZW	90°C (194°F) TBS, SA, SIS, FEP, FEPB, MI, RHH, RHW-2, THHN, XHH, XHHW, XHHW-2, USE-2, ZW, PV
14*	-	-	-
12*	15	20	25
10*	25	30	35
8	35	40	45
6	40	50	55
4	55	65	75
3	65	75	85
2	75	90	100
1	85	100	115
1/0	100	120	135
2/0	115	135	150
3/0	130	155	175
4/0	150	180	205
250	170	205	230
300	195	230	260
350	210	250	280
400	225	270	305
500	260	310	350
600	285	340	385
700	315	375	425
750	320	385	435
800	330	395	445
900	355	425	480
1000	375	445	500

ALLOWABLE AMPACITIES OF INSULATED COPPER CONDUCTORS

- Rated Up to and Including 2000 Volts, 60°C through 90°C (140°F through 194°F).
- Not More Than Three Current-Carrying Conductors in Raceway, Cable, or Earth (Directly Buried).
- Based on Ambient Temperature of 30°C (86°F).

Conductor Size (AWG or kcmil)	60°C (140°F) TW, UF	75°C (167°F) RHW, THHW, THW, THWN, XHHW, USE, ZW	90°C (194°F) TBS, SA, SIS, FEP, FEPB, MI, RHH, RHW-2, THHN, XHH, XHHW, XHHW-2, USE-2, ZW, PV
14*	15	20	25
12*	20	25	30
10*	30	35	40
8	40	50	55
6	55	65	75
4	70	85	95
3	85	100	115
2	95	115	130
1	110	130	145
1/0	125	150	170
2/0	145	175	195
3/0	165	200	225
4/0	195	230	260
250	215	255	290
300	240	285	320
350	260	310	350
400	280	335	380
500	320	380	430
600	350	420	475
700	385	460	520
750	400	475	535
800	410	490	555
900	435	520	585
1000	455	545	615

** Unless specifically permitted in 240.4(E) through (G), the overcurrent protection shall not exceed 15 amperes for 14 AWG, 20 amperes for 12 AWG, and 30 amperes for 10 AWG copper; or 15 amperes for 12 AWG and 25 amperes for 10 AWG aluminum and copper-clad aluminum after any correction factors for ambient temperature and number of conductors have been applied.*

See the NEC for conductor ampacities, correction factors, and conditions of use.