

# Copper/Aluminum Ampacity Chart

600V Feeder Cdr.	Size (AWG/KCMIL)	Ampacity at 75°C		Min. Size EMT Cond uit		Min. Size PVC Conduit (Sch. 40)	
Copper	Aluminum	Copper	Aluminum	Copper	Aluminum	Copper	Aluminum
8 - 8 - 8 - 8	6 - 6 - 6 - 6	50	50	3/4"	3/4"	3/4"	3/4"
6 - 6 - 6 - 8	4 - 4 - 4 - 6	65	65	3/4"	1"	3/4"	1"
4 - 4 - 4 - 8	2 - 2 - 2 - 6	85	90	1"	1-1/4"	1"	1-1/4"
3 - 3 - 3 - 8	1 - 1 - 1 - 6	100	100	1"	1-1/4"	1"	1-1/4"
2 - 2 - 2 - 6	1/0 - 1/0 - 1/0 - 4	115	120	1-1/4"	1-1/4"	1-1/4"	1-1/4"
1 - 1 - 1 - 6	2/0 - 2/0 - 2/0 - 4	130	135	1-1/4"	1-1/2"	1-1/4"	1-1/2"
1/0 - 1/0 - 1/0 - 6	3/0 - 3/0 - 3/0 - 4	150	155	1-1/4"	1-1/2"	1-1/4"	1-1/2"
2/0 - 2/0 - 2/0 - 4	4/0 - 4/0 - 4/0 - 2	175	180	1-1/2"	2"	1-1/2"	2"
3/0 - 3/0 - 3/0 - 4	250 - 250 - 250 - 2	200	205	2"	2"	2"	2"
4/0 - 4/0 - 4/0 - 4	300 - 300 - 300 - 2	230	230	2"	2"	2"	2"
-	350 - 350 - 350 - 2	-	250	-	2-1/2"	-	2-1/2"
250 - 250 - 250 - 3	400 - 400 - 400 - 1	255	270	2"	2-1/2"	2"	2-1/2"
300 - 300 - 300 - 3	500 - 500 - 500 - 1	285	310	2-1/2"	2-1/2"	2-1/2"	3"
350 - 350 - 350 - 3	500 - 500 - 500 - 1	310	310	2-1/2"	2-1/2"	2-1/2"	3"
400 - 400 - 400 - 3	600 - 600 - 600 - 1	335	340	2-1/2"	3"	2-1/2"	3"
500 - 500 - 500 - 2	750 - 750 - 750 - 1/0	380	385	2-1/2"	3"	3"	3"
600 - 600 - 600 - 2	900 - 900 - 900 - 1/0	420	425	3"	3"	3"	3-1/2"
-	1000 - 1000 - 1000 - 1/0	-	445	-	3-1/2"	-	3-1/2"

Note #1: Above chart is for single phase applications, 2 phase cdrs., 1 full size neutral, 1 ground cdr.

Note#2: All conductors are insulated with Southwire SIMpull THHN

Note#3: Minimum conduit size per NEC maximum fill rate of 40%

600V Feeder Cdr.	Size (AWG/KCMIL)	Ampacity at 75°C		Min. Size EMT Conduit		Min. Size PVC Conduit (Sch. 40)	
Copper	Aluminum	Copper	Aluminum	Copper	Aluminum	Copper	Aluminum
8 - 8 - 8 - 8 - 8	6 - 6 - 6 - 6 - 6	50	50	3/4"	1"	3/4"	1"
6 - 6 - 6 - 6 - 8	4 - 4 - 4 - 4 - 6	65	65	1"	1"	1"	1-1/4"
4 - 4 - 4 - 4 - 8	2 - 2 - 2 - 2 - 6	85	90	1-1/4"	1-1/4"	1-1/4"	1-1/4"
3 - 3 - 3 - 3 - 8	1 - 1 - 1 - 1 - 6	100	100	1-1/4"	1-1/4"	1-1/4"	1-1/4"
2 - 2 - 2 - 2 - 6	1/0 - 1/0 - 1/0 - 1/0 - 4	115	120	1-1/4"	1-1/2"	1-1/4"	1-1/2"
1 - 1 - 1 - 1 - 6	2/0 - 2/0 - 2/0 - 2/0 - 4	130	135	1-1/2"	2"	1-1/2"	2"
1/0 - 1/0 - 1/0 - 1/0 - 6	3/0 - 3/0 - 3/0 - 3/0 - 4	150	155	1-1/2"	2"	1-1/2"	2"
2/0 - 2/0 - 2/0 - 2/0 - 4	4/0 - 4/0 - 4/0 - 4/0 - 2	175	180	2"	2"	2"	2"
3/0 - 3/0 - 3/0 - 3/0 - 4	250 - 250 - 250 - 250 - 2	200	205	2"	2-1/2"	2"	2-1/2"
4/0 - 4/0 - 4/0 - 4/0 - 4	300 - 300 - 300 - 300 - 2	230	230	2"	2-1/2"	2"	2-1/2"
-	350 - 350 - 350 - 350 - 2	-	250	-	2-1/2"	-	3"
250 - 250 - 250 - 250 - 3	400 - 400 - 400 - 400 - 1	255	270	2-1/2"	2-1/2"	2-1/2"	3"
300 - 300 - 300 - 300 - 3	500 - 500 - 500 - 500 - 1	285	310	2-1/2"	3"	2-1/2"	3"
350 - 350 - 350 - 350 - 3	500 - 500 - 500 - 500 - 1	310	310	2-1/2"	3"	3"	3"
400 - 400 - 400 - 400 - 3	600 - 600 - 600 - 600 - 1	335	340	2-1/2"	3"	3"	3-1/2"
500 - 500 - 500 - 500 - 2	750 - 750 - 750 - 750 - 1/0	380	385	3"	3-1/2"	3"	3-1/2"
600 - 600 - 600 - 600 - 2	900 - 900 - 900 - 900 - 1/0	420	425	3"	3-1/2"	3-1/2"	4"
-	1000 - 1000 - 1000 - 1000 - 1/0	-	445	-	4"	-	4"

Note#1: Above chart is for three phase applications, 3 phase cdrs., 1 full size neutral, 1 ground cdr.

Note#2: All conductors are insulated with Southwire SIMpull THHN

Note#3: Minimum conduit size per NEC maximum fill rate of 40%

## Paralleling Options

Conductor Size (AWG/KCMIL)	Rating of O.C. Device	Number of parallel runs
500-500-500-500-2/0	600 amps	2
750-750-750-750-3/0	800 amps	2
600-600-600-600-4/0	1000 amps	3
500-500-500-500-250	1200 amps	4
600-600-600-600-350	1600 amps	5
600-600-600-600-400	2000 amps	6
750-750-750-750-750	2500 amps	7
750-750-750-750-750	3000 amps	8
750-750-750-750-750	4000 amps	11

Note: Grounds sized per NEC Table 250.122

Note: 1st three conductors are phases, 4th is neutral, 5th is ground



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