

Table B.310.8 {Detail 5 - One Circuit, 1-3/c Directly Buried}
 0-2000 Volt Cable, Ambient Earth Temperature = 20 Deg C, Earth Thermal resistivity (RHO) = 90,
 Load Factor = 100%, Conductor Temperature = 75C (167F).

Size (AWG or kcmil)		1 3/c Cable (Fig. B-310-2, Detail 5)																									
		60C (140F)		75C (167F)		60C (140F)		75C (167F)		60C (140F)		75C (167F)		60C (140F)		75C (167F)											
		TYPES																									
		UF	RHW THHW THW THWN XHHW USE			UF	RHW THHW THW THWN XHHW USE			UF	RHW THHW THW THWN XHHW USE			UF	RHW THHW THW THWN XHHW USE												
COPPER														ALUMINUM OR COPPER-CLAD ALUMINUM													
NEC		AmpCalc		%Deviation		NEC		AmpCalc		%Deviation		NEC		AmpCalc		%Deviation											
8	64	75	62.0	70.9	-3.1%	-5.5%	8	51	59	48.3	55.2	-5.3%	-6.4%														
6	85	100	80.7	92.3	-5.1%	-7.7%	6	68	75	62.9	72.0	-7.5%	-4.0%														
4	107	125	104.8	119.9	-2.1%	-4.1%	4	83	97	81.7	93.4	-1.6%	-3.7%														
2	137	161	135.3	154.7	-1.2%	-3.9%	2	107	126	105.5	120.6	-1.4%	-4.3%														
1	155	182	154.8	177.1	-0.1%	-2.7%	1	121	142	120.8	138.1	-0.2%	-2.7%														
1/0	177	208	176.7	202.1	-0.2%	-2.8%	1/0	138	162	137.8	157.6	-0.1%	-2.7%														
2/0	201	236	201.5	230.5	0.2%	-2.3%	2/0	157	184	157.3	179.8	0.2%	-2.3%														
3/0	229	269	229.8	263.0	0.3%	-2.2%	3/0	179	210	179.5	205.2	0.3%	-2.3%														
4/0	259	304	260.8	298.5	0.7%	-1.8%	4/0	203	238	203.9	233.1	0.4%	-2.1%														
250	-	333	-	327.6	-	-1.6%	250	-	261	-	256.2	-	-1.8%														
350	-	401	-	395.6	-	-1.3%	350	-	315	-	310.4	-	-1.5%														
500	-	481	-	474.6	-	-1.3%	500	-	381	-	375.3	-	-1.5%														
750	-	585	-	572.5	-	-2.1%	750	-	473	-	459.7	-	-2.8%														
1000	-	657	-	655.6	-	-0.2%	1000	-	545	-	536.3	-	-1.6%														
		Average Deviation =		-1.2%		-2.8%				Average Deviation =		-1.7%		-2.8%													

AmpCalc References:

AmpCalc Library = IEERUB_3, AmpCalc Volume = IEERUB1, 1 kV non-shielded.

Table B.310.8 {Detail 6 - Two Circuits, 2-3/c Directly Buried}
 0-2000 Volt Cable, Ambient Earth Temperature = 20 Deg C, Earth Thermal resistivity (RHO) = 90,
 Load Factor = 100%, Conductor Temperature = 75C (167F).

Size (AWG or kcmil)		2-3/c Cables (Fig. B-310-2, Detail 6)																																																																			
		60C (140F)		75C (167F)		60C (140F)		75C (167F)		60C (140F)		75C (167F)		60C (140F)		75C (167F)																																																					
		TYPES																																																																			
		UF	RHW THHW THW THWN XHHW USE	UF	RHW THHW THW THWN XHHW USE	UF	RHW THHW THW THWN XHHW USE	UF	RHW THHW THW THWN XHHW USE	UF	RHW THHW THW THWN XHHW USE	UF	RHW THHW THW THWN XHHW USE	UF	RHW THHW THW THWN XHHW USE	UF	RHW THHW THW THWN XHHW USE																																																				
COPPER														ALUMINUM OR COPPER-CLAD ALUMINUM																																																							
NEC		AmpCalc				%Deviation				NEC		AmpCalc				%Deviation																																																					
8	60	70	58.7	67.1	-2.2%	-4.1%	8	47	55	45.7	52.3	-2.8%	-4.9%	6	81	95	76.2	87.1	-5.9%	-8.3%	4	100	117	98.6	112.8	-1.4%	-3.6%	2	128	150	126.9	145.1	-0.9%	-3.3%	1	145	170	144.9	165.7	-0.1%	-2.5%																												
1/0	165	193	165.0	188.7	0.0%	-2.2%	1/0	129	151	128.7	147.1	-0.2%	-2.6%	2/0	188	220	187.8	214.8	-0.1%	-2.4%	3/0	213	250	213.7	244.5	0.3%	-2.2%	4/0	241	282	242.1	277.0	0.5%	-1.8%	250	-	308	-	303.6	-	-1.4%	350	-	370	-	365.2	-	-1.3%	500	-	442	-	437.0	-	-1.1%	750	-	535	-	526.3	-	-1.6%	1000	-	600	-	600.1	-	0.0%
		Average Deviation =				-1.1% -2.6%						Average Deviation =				-1.6% -2.6%																																																					

* Error in Code, should be 100a.

AmpCalc References:

AmpCalc Library = IEERUB_3, AmpCalc Volume = IEERUB1, 1 kV non-shielded.

NEC ampacities obtained from "NFPA 70, National Electric Code, 2002 Edition", © 2002, National Fire Protection Association, Inc.
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