2528

230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable in Underground Duct Bank - 1 Circuit - Three Cables - 12 in Spacing

25°C Earth Ambient

Condr Size	Sheath Res	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF	delta Td for .0027 pf & Rho 60	90	120
85°C - Copper Conductor - Hollow Core Concentric Strand										
1000	Open	852	797	791	723	738	663	8.1	9.8	11.6
1250	Open	960	895	887	809	825	740	8.4	10.2	12.0
1500	Open	1052	981	974	886	901	807	8.7	10.6	12.5
1750	Open	1136	1060	1050	950	971	863	8.9	10.9	12.9
2000	Open	1213	1122	1109	1007	1025	913	9.1	11.2	13.2
2250	Open	1281	1190	1166	1054	1068	947	10.9	13.4	16.0
85°C - Copper Conductor - Hollow Core Segmental Strand										
2000	Open	1230	1138	1125	1021	1040	926	9.1	11.1	13.2
2250	Open	1302	1209	1185	1070	1085	962	10.9	13.4	16.0
2500	Open	1376	1264	1242	1121	1135	1005	11.1	13.7	16.3
2750	Open	1431	1320	1296	1167	1182	1044	11.3	14.0	16.8
3000	Open	1481	1365	1339	1204	1219	1075	11.5	14.3	17.1

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable in Underground Duct Bank - 1 Circuit - Three Cables - 12 in Spacing

25°C Earth Ambient

Condr Size	Sheath Res	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	34.6	30.9	30.5	26.3	27.2	22.9
1250	Open	35.9	31.9	31.4	27.0	27.9	23.4
1500	Open	36.8	32.7	32.3	27.7	28.4	23.9
1750	Open	37.9	33.7	33.2	28.2	29.2	24.3
2000	Open	38.8	34.1	33.4	28.6	29.4	24.6
2250	Open	40.6	36.0	34.8	29.8	30.4	25.5
85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	38.8	34.1	33.4	28.6	29.4	24.6
2250	Open	40.6	36.0	34.9	29.8	30.4	25.5
2500	Open	41.6	36.3	35.3	30.1	30.7	25.7
2750	Open	42.0	36.9	35.8	30.5	31.1	26.0
3000	Open	42.6	37.4	36.2	30.8	31.4	26.2

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2530

230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

in Underground Duct Bank - 1 Circuit - Three Cables - 12 in Spacing

25°C Earth Ambient

Condr Size	Sheath Res	OD	Duct ID	Wd	Rac	Qs	Ri	Rj	Rsd	Rd	Re @ 90 Rho & loss factor 75%	Re @ 90 Rho & loss factor 100%
					85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	3.523	5.06	1.64	13.41	1.022	2.14	0.19	1.24	0.24	2.09	3.30
1250	Open	3.650	5.06	1.73	10.83	1.031	2.02	0.19	1.20	0.24	2.09	3.27
1500	Open	3.758	5.06	1.82	9.14	1.040	1.92	0.18	1.16	0.24	2.09	3.27
1750	Open	3.885	5.06	1.92	7.97	1.052	1.82	0.17	1.12	0.24	2.09	3.27
2000	Open	3.956	5.06	1.97	7.11	1.061	1.77	0.17	1.10	0.24	2.09	3.27
2250	Open	3.776	5.06	2.43	6.46	1.057	1.45	0.18	1.13	0.24	2.09	3.27
					85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	3.953	5.06	1.97	6.90	1.063	1.77	0.17	1.10	0.24	2.09	3.27
2250	Open	3.776	5.06	2.43	6.25	1.059	1.45	0.18	1.13	0.24	2.09	3.27
2500	Open	3.855	5.06	2.49	5.69	1.071	1.41	0.18	1.11	0.24	2.09	3.27
2750	Open	3.950	5.06	2.59	5.23	1.083	1.36	0.17	1.07	0.24	2.09	3.27
3000	Open	4.021	5.06	2.66	4.89	1.092	1.32	0.17	1.05	0.24	2.09	3.27

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

in Underground Duct Bank - 2 Circuits - Six Cables - 12 in Spacing

25°C Earth Ambient

Condr Size	Sheath Res	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF	delta Td for .0027 pf & Rho 60	90	120
85°C - Copper Conductor - Hollow Core Concentric Strand										
1000	Open	748	674	655	575	581	500	11.3	14.8	18.3
1250	Open	838	753	730	639	644	553	11.7	15.4	19.2
1500	Open	916	821	794	693	697	598	12.1	16.1	20.0
1750	Open	985	880	850	739	742	634	12.6	16.7	20.9
2000	Open	1045	932	898	780	782	668	12.9	17.1	21.4
2250	Open	1090	968	919	794	782	665	15.5	20.8	26.0
85°C - Copper Conductor - Hollow Core Segmental Strand										
2000	Open	1060	945	911	791	793	677	12.8	17.1	21.4
2250	Open	1108	983	934	807	795	676	15.5	20.8	26.0
2500	Open	1161	1029	974	841	826	701	15.8	21.2	26.6
2750	Open	1210	1070	1010	870	851	722	16.3	21.9	27.5
3000	Open	1249	1103	1039	894	872	738	16.6	22.4	28.1

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2532

230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

in Underground Duct Bank - 2 Circuits - Six Cables - 12 in Spacing

25°C Earth Ambient

Condr Size	Sheath Res	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	55.7	47.0	45.0	36.9	37.5	30.3
1250	Open	57.2	48.2	45.9	37.6	38.0	30.8
1500	Open	58.5	49.2	46.7	38.2	38.5	31.2
1750	Open	60.0	50.2	47.6	38.8	39.0	31.6
2000	Open	60.8	50.8	48.0	39.1	39.2	31.8
2250	Open	62.8	52.6	48.9	40.2	39.4	32.5
85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	60.8	50.8	48.0	39.1	39.3	31.8
2250	Open	62.9	52.6	48.9	40.2	39.5	32.6
2500	Open	63.7	53.3	49.3	40.5	39.6	32.7
2750	Open	64.6	53.9	49.7	40.9	39.8	33.0
3000	Open	65.3	54.5	50.1	41.2	40.0	33.2

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

in Underground Duct Bank - 2 Circuits - Six Cables - 12 in Spacing

25°C Earth Ambient

Condr Size	Sheath Res	OD	Duct ID	Wd	Rac	Qs	Ri	Rj	Rsd	Rd	Re @ 90 Rho & loss factor 75%	100%
					85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	3.523	5.06	1.64	13.41	1.016	2.14	0.19	1.19	0.24	4.00	6.34
1250	Open	3.650	5.06	1.73	10.83	1.023	2.02	0.19	1.14	0.24	4.00	6.34
1500	Open	3.758	5.06	1.82	9.14	1.030	1.92	0.18	1.11	0.24	4.00	6.34
1750	Open	3.885	5.06	1.92	7.97	1.039	1.82	0.17	1.07	0.24	4.00	6.34
2000	Open	3.956	5.06	1.97	7.11	1.047	1.77	0.17	1.05	0.24	4.00	6.34
2250	Open	3.776	5.06	2.43	6.46	1.044	1.45	0.18	1.08	0.24	4.00	6.34
					85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	3.953	5.06	1.97	6.90	1.048	1.77	0.17	1.05	0.24	4.00	6.34
2250	Open	3.776	5.06	2.43	6.25	1.045	1.45	0.18	1.08	0.24	4.00	6.34
2500	Open	3.855	5.06	2.49	5.69	1.054	1.41	0.18	1.06	0.24	4.00	6.34
2750	Open	3.950	5.06	2.59	5.23	1.063	1.36	0.17	1.03	0.24	4.00	6.34
3000	Open	4.021	5.06	2.66	4.89	1.071	1.32	0.17	1.01	0.24	4.00	6.34

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2534

230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Direct Buried - 1 Circuit - Three Cables - Spaced

25°C Earth Ambient

Condr Size	Sheath Res	60 Rho Amps	60 Rho Interface Temp °C	60 Rho Flux w/ft²	90 Rho Amps	90 Rho Interface Temp °C	90 Rho Flux w/ft²	120 Rho Amps	120 Rho Interface Temp °C	120 Rho Flux w/ft²	delta Td for .0027 pf & Rho 60	90	120
						75% LF							
						85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	1015	53	17.3	913	59	14.3	832	63	12.3	5.8	7.7	9.6
1250	Open	1145	54	17.5	1025	60	14.4	932	64	12.2	6.0	8.0	10.0
1500	Open	1260	54	17.7	1125	61	14.4	1019	65	12.2	6.2	8.3	10.4
1750	Open	1363	55	17.8	1213	61	14.5	1095	66	12.2	6.4	8.6	10.8
2000	Open	1451	56	18.0	1288	62	14.5	1162	66	12.2	6.5	8.8	11.0
2250	Open	1573	59	20.2	1376	65	16.1	1225	69	13.3	7.7	10.5	13.2
						85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	1471	56	18.0	1306	62	14.5	1177	66	12.2	6.5	8.8	11.0
2250	Open	1598	59	20.3	1398	65	16.1	1245	69	13.3	7.7	10.5	13.2
2500	Open	1680	59	20.4	1466	65	16.2	1303	70	13.3	7.8	10.7	13.5
2750	Open	1760	60	20.5	1531	66	16.1	1358	70	13.2	8.0	11.0	13.9
3000	Open	1824	60	20.5	1583	66	16.1	1402	70	13.2	8.2	11.2	14.2

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Direct Buried - 1 Circuit - Three Cables - Spaced

25°C Earth Ambient

Condr Size	Sheath Res	60 Rho Interface Temp	60 Rho Flux	60 Rho Amps	90 Rho Interface Temp	90 Rho Flux	90 Rho Amps	120 Rho Interface Temp	120 Rho Flux	120 Rho Amps	delta Td for .0027 pf & Rho 60	90	120
		°C	w/ft²	Amps	°C	w/ft²	Amps	°C	w/ft²	Amps			
					100% LF								
		85°C - Copper Conductor - Hollow Core Concentric Strand											
1000	Open	58	14.7	928	64	11.8	815	68	9.9	731	5.8	7.7	9.6
1250	Open	59	14.9	1043	65	11.8	913	69	9.7	816	6.0	8.0	10.0
1500	Open	60	14.9	1145	66	11.8	998	70	9.8	889	6.2	8.3	10.4
1750	Open	61	14.9	1235	67	11.7	1073	70	9.6	953	6.4	8.6	10.8
2000	Open	61	15.0	1312	67	11.8	1137	71	9.7	1008	6.5	8.8	11.0
2250	Open	64	16.8	1411	70	12.9	1206	73	10.5	1057	7.7	10.5	13.2
		85°C - Copper Conductor - Hollow Core Segmental Strand											
2000	Open	61	15.0	1330	67	11.8	1153	71	9.7	1022	6.5	8.8	11.0
2250	Open	64	16.8	1433	70	12.9	1225	73	10.5	1073	7.7	10.5	13.2
2500	Open	64	16.8	1504	70	12.9	1282	74	10.5	1122	7.8	10.7	13.5
2750	Open	65	16.8	1572	71	12.9	1336	74	10.3	1166	8.0	11.0	13.9
3000	Open	65	16.8	1626	71	12.8	1379	74	10.4	1202	8.2	11.2	14.2

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2536

230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Direct Buried - 1 Circuit - Three Cables - Spaced

25°C Earth Ambient

Condr Size	Sheath Res	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	47.2	40.2	39.1	32.1	33.3	26.8
1250	Open	49.0	41.5	40.3	33.0	34.2	27.4
1500	Open	50.6	42.7	41.4	33.8	35.0	27.9
1750	Open	52.2	43.9	42.6	34.6	35.7	28.5
2000	Open	53.2	44.6	43.2	35.0	36.3	28.8
2250	Open	57.7	47.8	45.9	36.9	37.9	30.0
85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	53.2	44.6	43.2	35.0	36.2	28.8
2250	Open	57.7	47.8	45.9	36.9	37.9	30.0
2500	Open	58.7	48.5	46.5	37.3	38.3	30.3
2750	Open	59.9	49.4	47.2	37.8	38.8	30.7
3000	Open	60.8	50.0	47.8	38.2	39.2	30.9

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Direct Buried - 1 Circuit - Three Cables - Spaced

25°C Earth Ambient

Condr Size	Sheath Res	OD	Wd	Rac	Qs	Ri	Rj	Re @ 90 Rho & loss factor 75%	100%
			85°C - Copper Conductor - Hollow Core Concentric Strand						
1000	Open	3.523	1.64	13.41	1.026	2.14	0.19	2.29	3.44
1250	Open	3.650	1.73	10.83	1.037	2.02	0.19	2.27	3.42
1500	Open	3.758	1.82	9.14	1.048	1.92	0.18	2.26	3.41
1750	Open	3.885	1.92	7.97	1.062	1.82	0.17	2.24	3.39
2000	Open	3.956	1.97	7.11	1.073	1.77	0.17	2.23	3.39
2250	Open	3.776	2.43	6.46	1.069	1.45	0.18	2.25	3.41
			85°C - Copper Conductor - Hollow Core Segmental Strand						
2000	Open	3.953	1.97	6.90	1.075	1.77	0.17	2.23	3.39
2250	Open	3.776	2.43	6.25	1.071	1.45	0.18	2.25	3.41
2500	Open	3.855	2.49	5.69	1.085	1.41	0.18	2.24	3.40
2750	Open	3.950	2.59	5.23	1.099	1.36	0.17	2.23	3.39
3000	Open	4.021	2.66	4.89	1.110	1.32	0.17	2.22	3.38

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2538

230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Direct Buried - 2 Circuits - Six Cables - Spaced

25°C Earth Ambient

Condr Size	Sheath Res	---- 60 Rho--- Interface Temp Amps	Flux °C	Flux w/ft²	---- 90 Rho--- Interface Temp Amps	Flux °C	Flux w/ft²	----120 Rho--- Interface Temp Amps	Flux °C	Flux w/ft²	delta Td for .0027 pf & Rho 60	90	120
					75% LF								
					85°C - Copper Conductor - Hollow Core Concentric Strand								
1000	Open	961	56	15.8	851	62	12.8	765	67	10.6	6.8	9.1	11.5
1250	Open	1081	57	15.9	952	63	12.8	854	68	10.6	7.0	9.5	12.0
1500	Open	1187	58	16.0	1042	64	12.7	931	68	10.6	7.3	9.9	12.5
1750	Open	1281	59	16.1	1119	65	12.8	997	69	10.5	7.5	10.2	13.0
2000	Open	1361	59	16.2	1187	65	12.7	1055	70	10.5	7.7	10.5	13.3
2250	Open	1465	62	18.1	1257	68	14.0	1101	72	11.3	9.1	12.6	16.0
					85°C - Copper Conductor - Hollow Core Segmental Strand								
2000	Open	1380	59	16.2	1203	65	12.8	1069	70	10.5	7.7	10.5	13.3
2250	Open	1489	62	18.1	1277	68	14.0	1118	72	11.3	9.1	12.6	16.0
2500	Open	1562	63	18.2	1336	69	14.0	1168	73	11.3	9.3	12.8	16.4
2750	Open	1632	63	18.2	1391	69	13.9	1212	73	11.2	9.5	13.2	16.9
3000	Open	1689	64	18.2	1435	70	13.9	1248	73	11.1	9.7	13.5	17.2

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Direct Buried - 2 Circuits - Six Cables - Spaced

25°C Earth Ambient

Condr Size	Sheath Res	60 Rho Amps	60 Rho Interface Temp °C	60 Rho Flux w/ft²	90 Rho Amps	90 Rho Interface Temp °C	90 Rho Flux w/ft²	120 Rho Amps	120 Rho Interface Temp °C	120 Rho Flux w/ft²	delta Td for .0027 pf & Rho 60	90	120
						100% LF							
						85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	866	62	13.1	749	67	10.3	663	71	8.5	6.8	9.1	11.5
1250	Open	971	62	13.2	836	68	10.3	737	72	8.4	7.0	9.5	12.0
1500	Open	1062	63	13.2	911	69	10.2	801	73	8.3	7.3	9.9	12.5
1750	Open	1143	64	13.2	976	70	10.1	856	73	8.3	7.5	10.2	13.0
2000	Open	1212	65	13.2	1033	70	10.1	903	74	8.2	7.7	10.5	13.3
2250	Open	1294	67	14.7	1086	72	11.0	937	76	8.9	9.1	12.6	16.0
						85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	1229	65	13.2	1047	70	10.1	916	74	8.2	7.7	10.5	13.3
2250	Open	1314	67	14.7	1103	72	11.0	952	76	8.9	9.1	12.6	16.0
2500	Open	1377	68	14.7	1152	73	11.0	992	76	8.8	9.3	12.8	16.4
2750	Open	1435	68	14.7	1197	73	10.9	1028	76	8.7	9.5	13.2	16.9
3000	Open	1482	69	14.6	1233	74	10.9	1056	77	8.6	9.7	13.5	17.2

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Direct Buried - 2 Circuits - Six Cables - Spaced

25°C Earth Ambient

Condr Size	Sheath Res	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	85.8	71.6	69.4	56.0	58.0	46.0
1250	Open	88.7	73.6	71.2	57.3	59.3	46.8
1500	Open	91.5	75.4	73.0	58.4	60.5	47.6
1750	Open	94.2	77.4	74.6	59.5	61.6	48.4
2000	Open	95.9	78.5	75.8	60.3	62.3	48.8
2250	Open	102.8	83.4	79.5	63.0	64.4	50.6
85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	95.8	78.5	75.7	60.2	62.2	48.8
2250	Open	102.9	83.3	79.5	63.0	64.4	50.7
2500	Open	104.4	84.4	80.4	63.6	64.9	51.0
2750	Open	106.3	85.7	81.4	64.3	65.6	51.5
3000	Open	107.8	86.6	82.2	64.9	66.1	51.8

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Direct Buried - 2 Circuits - Six Cables - Spaced

25°C Earth Ambient

Condr Size	Sheath Res	OD	Wd	Rac	Qs	Ri	Rj	Re @ 90 Rho & loss factor 75%	100%
85°C - Copper Conductor - Hollow Core Concentric Strand									
1000	Open	3.523	1.64	13.41	1.029	2.14	0.19	2.82	4.30
1250	Open	3.650	1.73	10.83	1.041	2.02	0.19	2.80	4.29
1500	Open	3.758	1.82	9.14	1.053	1.92	0.18	2.79	4.27
1750	Open	3.885	1.92	7.97	1.068	1.82	0.17	2.78	4.26
2000	Open	3.956	1.97	7.11	1.080	1.77	0.17	2.77	4.25
2250	Open	3.776	2.43	6.46	1.076	1.45	0.18	2.79	4.27
85°C - Copper Conductor - Hollow Core Segmental Strand									
2000	Open	3.953	1.97	6.90	1.083	1.77	0.17	2.77	4.25
2250	Open	3.776	2.43	6.25	1.078	1.45	0.18	2.79	4.27
2500	Open	3.855	2.49	5.69	1.094	1.41	0.18	2.78	4.26
2750	Open	3.950	2.59	5.23	1.109	1.36	0.17	2.77	4.25
3000	Open	4.021	2.66	4.89	1.122	1.32	0.17	2.76	4.24

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2542

230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Isolated Cable in Non-Metallic Conduit in Air

40°C Air Ambient

Condr Size	Sheath Res	No Sun 0 Ft/s	No Sun 2 Ft/s	Full Sun 0 Ft/s	Full Sun 2 Ft/s	delta Td for .0027 pf No Sun 0 Ft/s	delta Td for .0027 pf No Sun 2 Ft/s
85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	769	791	458	552	6.3	5.9
1250	Open	871	897	517	624	6.4	6.0
1500	Open	963	992	570	689	6.6	6.2
1750	Open	1047	1080	618	749	6.7	6.3
2000	Open	1119	1155	660	800	6.8	6.4
2250	Open	1186	1227	678	837	8.1	7.6
85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	1133	1168	667	810	6.8	6.4
2250	Open	1208	1250	690	852	8.1	7.6
2500	Open	1277	1322	728	900	8.2	7.7
2750	Open	1345	1393	764	947	8.3	7.8
3000	Open	1401	1452	794	985	8.4	7.9

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Isolated Cable in Non-Metallic Conduit in Air

40°C Air Ambient

Condr Size	Sheath Res	No Sun 0 Ft/s	No Sun 2 Ft/s	Full Sun 0 Ft/s	Full Sun 2 Ft/s
		Total Watts/ft			
85°C - Copper Conductor - Hollow Core Concentric Strand					
1000	Open	28.7	30.1	13.3	17.2
1250	Open	29.8	31.3	13.9	17.8
1500	Open	30.8	32.4	14.3	18.4
1750	Open	31.8	33.5	14.8	19.1
2000	Open	32.4	34.1	15.1	19.5
2250	Open	34.5	36.5	16.2	20.9
85°C - Copper Conductor - Hollow Core Segmental Strand					
2000	Open	32.4	34.1	15.1	19.5
2250	Open	34.6	36.5	16.2	20.9
2500	Open	35.2	37.2	16.5	21.2
2750	Open	36.0	38.0	16.9	21.8
3000	Open	36.6	38.7	17.2	22.1

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Isolated Cable in Non-Metallic Conduit in Air

40°C Air Ambient

Condr Size	Sheath Res	OD	Duct ID	Wd	Rac	Qs	Ri	Rj	Rsd	Rd	Re No Sun 0 fps	Re No Sun 2 fps
					85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	3.523	5.05	1.64	13.40	1.000	2.14	0.19	1.50	0.31	0.75	0.52
1250	Open	3.650	5.05	1.73	10.80	1.000	2.02	0.19	1.45	0.31	0.75	0.52
1500	Open	3.758	5.05	1.82	9.11	1.000	1.92	0.18	1.41	0.31	0.74	0.51
1750	Open	3.885	5.05	1.92	7.92	1.000	1.82	0.17	1.36	0.31	0.74	0.51
2000	Open	3.956	5.05	1.97	7.05	1.000	1.77	0.17	1.34	0.31	0.74	0.51
2250	Open	3.776	5.05	2.43	6.46	1.000	1.45	0.18	1.39	0.31	0.74	0.51
					85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	3.953	5.05	1.97	6.88	1.000	1.77	0.17	1.34	0.31	0.74	0.51
2250	Open	3.776	5.05	2.43	6.23	1.000	1.45	0.18	1.39	0.31	0.74	0.51
2500	Open	3.855	5.05	2.49	5.66	1.000	1.41	0.18	1.36	0.31	0.74	0.51
2750	Open	3.950	5.05	2.59	5.20	1.000	1.36	0.17	1.33	0.31	0.73	0.51
3000	Open	4.021	5.05	2.66	4.86	1.000	1.32	0.17	1.30	0.31	0.73	0.51

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Isolated Cable in Free Air

40°C Air Ambient

Condr Size	Sheath Res	No Sun 0 Ft/s	No Sun 2 Ft/s	Full Sun 0 Ft/s	Full Sun 2 Ft/s	delta Td for .0027 pf No Sun 0 Ft/s	delta Td for .0027 pf No Sun 2 Ft/s
85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	951	1007	619	752	3.8	3.3
1250	Open	1084	1148	704	855	3.9	3.3
1500	Open	1206	1277	780	948	3.9	3.4
1750	Open	1320	1399	853	1035	3.9	3.4
2000	Open	1417	1501	914	1109	4.0	3.4
2250	Open	1548	1653	996	1222	4.6	3.9
85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	1434	1518	924	1121	4.0	3.4
2250	Open	1577	1683	1014	1244	4.6	3.9
2500	Open	1674	1787	1074	1318	4.6	3.9
2750	Open	1773	1892	1136	1392	4.6	3.9
3000	Open	1854	1978	1186	1453	4.7	4.0

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Isolated Cable in Free Air

40°C Air Ambient

Condr Size	Sheath Res	No Sun 0 Ft/s	No Sun 2 Ft/s	Full Sun 0 Ft/s	Full Sun 2 Ft/s
		Total Watts/ft			
85°C - Copper Conductor - Hollow Core Concentric Strand					
1000	Open	13.8	15.2	6.8	9.2
1250	Open	14.4	16.0	7.1	9.6
1500	Open	15.1	16.7	7.4	10.0
1750	Open	15.7	17.4	7.7	10.4
2000	Open	16.1	17.9	7.9	10.6
2250	Open	17.9	20.1	8.8	12.1
85°C - Copper Conductor - Hollow Core Segmental Strand					
2000	Open	16.1	17.8	7.8	10.6
2250	Open	17.9	20.1	8.8	12.1
2500	Open	18.4	20.6	9.0	12.3
2750	Open	18.9	21.2	9.3	12.7
3000	Open	19.4	21.7	9.5	12.9

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Isolated Cable in Free Air

40°C Air Ambient

Condr Size	Sheath Res	OD	Duct ID	Wd	Rac	Qs	Ri	Rj	Rsd	Rd	Re No Sun 0 fps	Re Sun 2 fps
85°C - Copper Conductor - Hollow Core Concentric Strand												
1000	Open	3.523	9.99	1.64	13.40	1.000	2.14	0.19	0.00	0.00	1.07	0.74
1250	Open	3.650	9.99	1.73	10.80	1.000	2.02	0.19	0.00	0.00	1.03	0.72
1500	Open	3.758	9.99	1.82	9.11	1.000	1.92	0.18	0.00	0.00	1.00	0.70
1750	Open	3.885	9.99	1.92	7.92	1.000	1.82	0.17	0.00	0.00	0.97	0.69
2000	Open	3.956	9.99	1.97	7.05	1.000	1.77	0.17	0.00	0.00	0.96	0.68
2250	Open	3.776	9.99	2.43	6.46	1.000	1.45	0.18	0.00	0.00	0.98	0.70
85°C - Copper Conductor - Hollow Core Segmental Strand												
2000	Open	3.953	9.99	1.97	6.88	1.000	1.77	0.17	0.00	0.00	0.96	0.68
2250	Open	3.776	9.99	2.43	6.23	1.000	1.45	0.18	0.00	0.00	0.98	0.70
2500	Open	3.855	9.99	2.49	5.66	1.000	1.41	0.18	0.00	0.00	0.96	0.69
2750	Open	3.950	9.99	2.59	5.20	1.000	1.36	0.17	0.00	0.00	0.94	0.67
3000	Open	4.021	9.99	2.66	4.86	1.000	1.32	0.17	0.00	0.00	0.92	0.66

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2548

230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Isolated Cable in Non-Metallic Unventilated Riser in Air

40°C Air Ambient

Condr Size	Sheath Res	No Sun 0 Ft/s	No Sun 2 Ft/s	Full Sun 0 Ft/s	Full Sun 2 Ft/s	delta Td for .0027 pf No Sun 0 Ft/s	delta Td for .0027 pf No Sun 2 Ft/s
85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	800	825	591	662	5.8	5.4
1250	Open	906	936	669	750	5.9	5.5
1500	Open	1002	1035	739	829	6.0	5.6
1750	Open	1090	1128	803	902	6.2	5.7
2000	Open	1166	1207	858	965	6.2	5.8
2250	Open	1245	1293	906	1026	7.4	6.8
85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	1179	1221	869	976	6.2	5.8
2250	Open	1268	1317	923	1044	7.4	6.8
2500	Open	1341	1393	975	1104	7.4	6.9
2750	Open	1413	1469	1026	1163	7.6	7.0
3000	Open	1472	1531	1068	1212	7.7	7.1

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230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Isolated Cable in Non-Metallic Unventilated Riser in Air

40°C Air Ambient

Condr Size	Sheath Res	No Sun 0 Ft/s	No Sun 2 Ft/s	Full Sun 0 Ft/s	Full Sun 2 Ft/s
		Total Watts/ft			
85°C - Copper Conductor - Hollow Core Concentric Strand					
1000	Open	10.2	10.8	6.3	7.5
1250	Open	10.6	11.2	6.6	7.8
1500	Open	11.0	11.6	6.8	8.1
1750	Open	11.3	12.0	7.0	8.4
2000	Open	11.6	12.2	7.2	8.5
2250	Open	12.4	13.2	7.7	9.2
85°C - Copper Conductor - Hollow Core Segmental Strand					
2000	Open	11.5	12.2	7.2	8.5
2250	Open	12.4	13.2	7.7	9.2
2500	Open	12.7	13.5	7.9	9.4
2750	Open	13.0	13.8	8.1	9.6
3000	Open	13.2	14.1	8.2	9.8

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2550

230 kV 1/c Self Contained Liquid Filled Aluminum Sheathed Power Cable

Isolated Cable in Non-Metallic Unventilated Riser in Air

40°C Air Ambient

Condr Size	Sheath Res	OD	Duct ID	Wd	Rac	Qs	Ri	Rj	Rsd	Rd	Re No Sun 0 fps	Re 2 fps
					85°C - Copper Conductor - Hollow Core Concentric Strand							
1000	Open	3.523	5.05	1.64	13.40	1.000	2.14	0.19	1.19	0.31	0.75	0.51
1250	Open	3.650	5.05	1.73	10.80	1.000	2.02	0.19	1.15	0.31	0.75	0.51
1500	Open	3.758	5.05	1.82	9.11	1.000	1.92	0.18	1.11	0.31	0.75	0.51
1750	Open	3.885	5.05	1.92	7.92	1.000	1.82	0.17	1.08	0.31	0.74	0.51
2000	Open	3.956	5.05	1.97	7.05	1.000	1.77	0.17	1.06	0.31	0.74	0.51
2250	Open	3.776	5.05	2.43	6.46	1.000	1.45	0.18	1.09	0.31	0.74	0.51
					85°C - Copper Conductor - Hollow Core Segmental Strand							
2000	Open	3.953	5.05	1.97	6.88	1.000	1.77	0.17	1.06	0.31	0.74	0.51
2250	Open	3.776	5.05	2.43	6.23	1.000	1.45	0.18	1.09	0.31	0.74	0.51
2500	Open	3.855	5.05	2.49	5.66	1.000	1.41	0.18	1.06	0.31	0.74	0.51
2750	Open	3.950	5.05	2.59	5.20	1.000	1.36	0.17	1.04	0.31	0.73	0.51
3000	Open	4.021	5.05	2.66	4.86	1.000	1.32	0.17	1.02	0.31	0.73	0.51

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