2574

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 - Aluminum Conductor - Hollow Core Concentric Strand								
1000	Open	667	624	619	566	578	519	8.2	9.9	11.6
1250	Open	754	704	698	637	650	582	8.4	10.3	12.1
1500	Open	832	776	769	699	713	638	8.7	10.6	12.5
1750	Open	906	842	832	757	771	688	8.9	10.9	12.9
2000	Open	968	900	891	808	822	733	9.1	11.2	13.2
2250	Open	1032	954	938	848	860	762	10.9	13.4	16.0
		85°C - Aluminum Conductor - Hollow Core Segmental Strand								
2000	Open	975	906	898	814	828	739	9.1	11.1	13.2
2250	Open	1041	964	947	856	869	770	10.9	13.4	16.0
2500	Open	1099	1016	998	902	915	808	11.1	13.7	16.3
2750	Open	1156	1067	1051	945	958	844	11.3	14.0	16.8
3000	Open	1203	1112	1088	978	990	874	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 - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	34.5	30.8	30.4	26.2	27.2	22.9
1250	Open	35.7	31.8	31.3	27.0	27.9	23.4
1500	Open	36.7	32.7	32.2	27.5	28.4	23.9
1750	Open	37.9	33.5	32.9	28.2	29.0	24.3
2000	Open	38.4	34.0	33.5	28.6	29.4	24.6
2250	Open	40.6	35.8	34.8	29.8	30.4	25.4
85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	38.4	34.0	33.5	28.6	29.3	24.6
2250	Open	40.5	35.8	34.8	29.8	30.5	25.5
2500	Open	41.1	36.2	35.2	30.1	30.8	25.7
2750	Open	41.9	36.9	36.0	30.6	31.2	26.0
3000	Open	42.5	37.5	36.2	30.8	31.3	26.2

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2576

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%	100%
					85°C - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	3.523	5.06	1.64	21.96	1.009	2.14	0.19	1.24	0.24	2.11	3.30
1250	Open	3.650	5.06	1.73	17.62	1.013	2.02	0.19	1.19	0.24	2.11	3.30
1500	Open	3.758	5.06	1.82	14.76	1.025	1.92	0.18	1.16	0.24	2.09	3.30
1750	Open	3.885	5.06	1.92	12.73	1.032	1.82	0.17	1.12	0.24	2.09	3.27
2000	Open	3.956	5.06	1.97	11.22	1.039	1.77	0.17	1.10	0.24	2.09	3.27
2250	Open	3.776	5.06	2.43	10.14	1.037	1.45	0.18	1.13	0.24	2.09	3.27
					85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	3.953	5.06	1.97	11.05	1.039	1.77	0.17	1.10	0.24	2.09	3.27
2250	Open	3.776	5.06	2.43	9.93	1.037	1.45	0.18	1.13	0.24	2.09	3.27
2500	Open	3.855	5.06	2.49	8.96	1.045	1.41	0.18	1.10	0.24	2.09	3.27
2750	Open	3.950	5.06	2.59	8.17	1.053	1.36	0.17	1.07	0.24	2.09	3.27
3000	Open	4.021	5.06	2.66	7.58	1.060	1.32	0.17	1.06	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	delta Td for .0027 pf & Rho 90	delta Td for .0027 pf & Rho 120
85°C - Aluminum Conductor - Hollow Core Concentric Strand										
1000	Open	586	528	513	450	455	392	11.3	14.8	18.3
1250	Open	659	592	574	502	506	435	11.7	15.4	19.2
1500	Open	724	649	628	548	551	473	12.1	16.1	20.0
1750	Open	783	700	676	589	590	505	12.6	16.7	20.9
2000	Open	836	746	719	625	626	535	12.9	17.1	21.4
2250	Open	875	777	738	638	628	535	15.5	20.8	26.0
85°C - Aluminum Conductor - Hollow Core Segmental Strand										
2000	Open	843	752	725	630	631	539	12.8	17.1	21.4
2250	Open	884	785	745	645	635	540	15.5	20.8	26.0
2500	Open	931	826	782	675	663	563	15.8	21.2	26.6
2750	Open	975	863	815	703	687	583	16.3	21.9	27.5
3000	Open	1012	894	842	725	707	599	16.6	22.4	28.1

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2578

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 - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	55.6	47.0	44.9	36.8	37.4	30.3
1250	Open	57.0	48.0	45.8	37.5	37.9	30.7
1500	Open	58.3	49.0	46.6	38.1	38.4	31.2
1750	Open	59.6	49.9	47.3	38.7	38.8	31.5
2000	Open	60.5	50.6	47.8	39.0	39.1	31.8
2250	Open	62.6	52.4	48.7	40.1	39.3	32.5
85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	60.5	50.5	47.8	39.0	39.1	31.7
2250	Open	62.6	52.4	48.7	40.1	39.3	32.5
2500	Open	63.3	53.0	49.1	40.4	39.5	32.7
2750	Open	64.2	53.7	49.5	40.8	39.7	32.9
3000	Open	64.9	54.1	49.8	41.1	39.8	33.1

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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%	Re @ 90 Rho & loss factor 100%
					85°C - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	3.523	5.06	1.64	21.96	1.010	2.14	0.19	1.19	0.24	4.00	6.34
1250	Open	3.650	5.06	1.73	17.62	1.014	2.02	0.19	1.14	0.24	4.00	6.34
1500	Open	3.758	5.06	1.82	14.76	1.019	1.92	0.18	1.11	0.24	4.00	6.34
1750	Open	3.885	5.06	1.92	12.73	1.025	1.82	0.17	1.07	0.24	4.00	6.34
2000	Open	3.956	5.06	1.97	11.22	1.029	1.77	0.17	1.05	0.24	4.00	6.34
2250	Open	3.776	5.06	2.43	10.14	1.028	1.45	0.18	1.08	0.24	4.00	6.34
					85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	3.953	5.06	1.97	11.05	1.030	1.77	0.17	1.05	0.24	4.00	6.34
2250	Open	3.776	5.06	2.43	9.93	1.028	1.45	0.18	1.08	0.24	4.00	6.34
2500	Open	3.855	5.06	2.49	8.96	1.034	1.41	0.18	1.06	0.24	4.00	6.34
2750	Open	3.950	5.06	2.59	8.17	1.040	1.36	0.17	1.03	0.24	4.00	6.34
3000	Open	4.021	5.06	2.66	7.58	1.046	1.32	0.17	1.01	0.24	4.00	6.34

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2580

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 - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	795	53	17.2	715	59	14.2	652	63	12.1	5.8	7.7	9.6
1250	Open	900	53	17.3	807	60	14.2	733	64	12.0	6.0	8.0	10.0
1500	Open	996	54	17.4	890	60	14.2	806	65	12.0	6.2	8.3	10.4
1750	Open	1085	55	17.5	966	61	14.3	873	66	12.0	6.4	8.6	10.8
2000	Open	1162	55	17.6	1033	62	14.3	932	66	12.0	6.5	8.8	11.0
2250	Open	1264	58	19.9	1107	65	15.8	986	69	13.0	7.7	10.5	13.2
						85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	1171	55	17.6	1040	62	14.3	939	66	12.0	6.5	8.8	11.0
2250	Open	1277	58	19.9	1118	65	15.9	996	69	13.0	7.7	10.5	13.2
2500	Open	1350	59	19.9	1179	65	15.8	1049	69	13.0	7.8	10.7	13.5
2750	Open	1421	60	20.0	1238	66	15.8	1099	70	13.0	8.0	11.0	13.9
3000	Open	1481	60	20.0	1287	66	15.8	1140	70	12.9	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 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 - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	727	58	14.6	639	64	11.7	573	68	9.8	5.8	7.7	9.6
1250	Open	821	59	14.7	719	65	11.7	642	69	9.7	6.0	8.0	10.0
1500	Open	906	60	14.7	790	66	11.6	704	70	9.7	6.2	8.3	10.4
1750	Open	983	60	14.6	855	66	11.6	760	70	9.5	6.4	8.6	10.8
2000	Open	1052	61	14.7	913	67	11.6	810	71	9.5	6.5	8.8	11.0
2250	Open	1135	64	16.5	970	69	12.7	851	73	10.3	7.7	10.5	13.2
						85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	1060	61	14.7	919	67	11.6	816	71	9.5	6.5	8.8	11.0
2250	Open	1146	64	16.5	980	69	12.7	859	73	10.3	7.7	10.5	13.2
2500	Open	1209	64	16.4	1032	70	12.7	903	73	10.3	7.8	10.7	13.5
2750	Open	1271	65	16.4	1081	70	12.6	944	74	10.3	8.0	11.0	13.9
3000	Open	1321	65	16.4	1122	71	12.5	978	74	10.2	8.2	11.2	14.2

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2582

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 - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	47.0	40.1	39.0	32.1	33.3	26.8
1250	Open	48.7	41.4	40.2	33.0	34.1	27.4
1500	Open	50.4	42.6	41.3	33.7	34.9	27.9
1750	Open	52.0	43.7	42.4	34.5	35.7	28.5
2000	Open	52.9	44.5	43.1	34.9	36.2	28.8
2250	Open	57.5	47.7	45.8	36.8	37.8	30.0
85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	52.9	44.5	43.0	34.9	36.2	28.8
2250	Open	57.5	47.7	45.8	36.8	37.8	30.0
2500	Open	58.4	48.4	46.3	37.3	38.3	30.3
2750	Open	59.6	49.2	47.1	37.8	38.8	30.6
3000	Open	60.5	49.8	47.7	38.1	39.1	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%	Re @ 90 Rho & loss factor 100%
		85°C - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	3.523	1.64	21.96	1.016	2.14	0.19	2.29	3.44
1250	Open	3.650	1.73	17.62	1.023	2.02	0.19	2.27	3.42
1500	Open	3.758	1.82	14.76	1.030	1.92	0.18	2.26	3.41
1750	Open	3.885	1.92	12.73	1.039	1.82	0.17	2.24	3.39
2000	Open	3.956	1.97	11.22	1.046	1.77	0.17	2.23	3.39
2250	Open	3.776	2.43	10.14	1.044	1.45	0.18	2.25	3.41
		85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	3.953	1.97	11.05	1.047	1.77	0.17	2.23	3.39
2250	Open	3.776	2.43	9.93	1.045	1.45	0.18	2.25	3.41
2500	Open	3.855	2.49	8.96	1.054	1.41	0.18	2.24	3.40
2750	Open	3.950	2.59	8.17	1.063	1.36	0.17	2.23	3.39
3000	Open	4.021	2.66	7.58	1.071	1.32	0.17	2.22	3.38

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2584

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
						75% LF							
						85°C - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	753	56	15.6	667	62	12.7	600	67	10.5	6.8	9.2	11.5
1250	Open	851	57	15.7	751	63	12.6	673	67	10.5	7.0	9.5	12.0
1500	Open	939	58	15.8	825	64	12.6	737	68	10.4	7.3	9.9	12.5
1750	Open	1021	58	15.7	893	65	12.5	795	69	10.3	7.5	10.2	13.0
2000	Open	1091	59	15.8	953	65	12.6	847	69	10.3	7.7	10.5	13.3
2250	Open	1179	62	17.8	1013	68	13.8	887	72	11.1	9.1	12.6	16.0
						85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	1100	59	15.8	960	65	12.6	854	69	10.3	7.7	10.5	13.3
2250	Open	1191	62	17.8	1023	68	13.8	896	72	11.1	9.1	12.6	16.0
2500	Open	1256	62	17.7	1076	68	13.7	941	72	11.1	9.3	12.8	16.4
2750	Open	1321	63	17.8	1127	69	13.6	983	73	10.9	9.5	13.2	16.9
3000	Open	1373	63	17.8	1169	69	13.6	1017	73	10.9	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 Interface Temp Amps	60 Rho Interface Temp °C	60 Rho Flux w/ft²	90 Rho Interface Temp Amps	90 Rho Interface Temp °C	90 Rho Flux w/ft²	120 Rho Interface Temp Amps	120 Rho Interface Temp °C	120 Rho Flux w/ft²	delta Td for .0027 pf & Rho 60	90	120
						100% LF							
						85°C - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	679	61	13.0	587	67	10.2	519	71	8.3	6.8	9.2	11.5
1250	Open	765	62	13.0	658	68	10.2	581	72	8.3	7.0	9.5	12.0
1500	Open	841	63	13.0	722	69	10.1	635	73	8.2	7.3	9.9	12.5
1750	Open	911	64	13.0	779	70	9.9	683	73	8.1	7.5	10.2	13.0
2000	Open	973	64	12.9	830	70	9.9	726	73	8.1	7.7	10.5	13.3
2250	Open	1042	67	14.4	875	72	10.9	756	76	8.7	9.1	12.6	16.0
						85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	980	64	12.9	836	70	10.0	732	73	8.1	7.7	10.5	13.3
2250	Open	1052	67	14.5	884	72	10.9	763	76	8.7	9.1	12.6	16.0
2500	Open	1108	67	14.4	928	73	10.8	800	76	8.7	9.3	12.8	16.4
2750	Open	1162	68	14.3	970	73	10.7	834	76	8.6	9.5	13.2	16.9
3000	Open	1207	68	14.2	1005	73	10.6	862	77	8.5	9.7	13.5	17.2

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2586

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 - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	85.6	71.4	69.3	55.9	57.9	45.8
1250	Open	88.5	73.5	71.2	57.1	59.2	46.8
1500	Open	91.1	75.2	72.8	58.3	60.3	47.6
1750	Open	93.8	77.0	74.5	59.4	61.4	48.3
2000	Open	95.2	78.1	75.4	60.1	62.1	48.8
2250	Open	102.3	83.1	79.3	62.9	64.2	50.6
85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	95.3	78.1	75.4	60.0	62.1	48.8
2250	Open	102.4	83.1	79.4	63.0	64.3	50.6
2500	Open	103.8	84.1	80.1	63.4	64.8	51.0
2750	Open	105.8	85.4	81.2	64.2	65.5	51.5
3000	Open	107.0	86.3	82.0	64.7	65.9	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%	Re @ 90 Rho & loss factor 100%
		85°C - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	3.523	1.64	21.96	1.013	2.14	0.19	2.84	4.33
1250	Open	3.650	1.73	17.62	1.025	2.02	0.19	2.80	4.31
1500	Open	3.758	1.82	14.76	1.033	1.92	0.18	2.79	4.27
1750	Open	3.885	1.92	12.73	1.043	1.82	0.17	2.78	4.26
2000	Open	3.956	1.97	11.22	1.051	1.77	0.17	2.77	4.25
2250	Open	3.776	2.43	10.14	1.048	1.45	0.18	2.79	4.27
		85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	3.953	1.97	11.05	1.052	1.77	0.17	2.77	4.25
2250	Open	3.776	2.43	9.93	1.049	1.45	0.18	2.79	4.27
2500	Open	3.855	2.49	8.96	1.060	1.41	0.18	2.78	4.26
2750	Open	3.950	2.59	8.17	1.070	1.36	0.17	2.77	4.25
3000	Open	4.021	2.66	7.58	1.078	1.32	0.17	2.76	4.24

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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	delta Td for .0027 pf No Sun 0 Ft/s	delta Td for .0027 pf No Sun 2 Ft/s
85°C - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	601	618	358	431	6.3	5.9
1250	Open	682	702	405	489	6.4	6.0
1500	Open	756	779	448	542	6.6	6.2
1750	Open	827	853	488	592	6.7	6.3
2000	Open	888	916	523	635	6.8	6.4
2250	Open	947	980	541	668	8.1	7.6
85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	895	923	527	640	6.8	6.4
2250	Open	957	990	547	675	8.1	7.6
2500	Open	1016	1051	579	716	8.2	7.7
2750	Open	1074	1113	610	756	8.3	7.8
3000	Open	1123	1164	636	790	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 - Aluminum Conductor - Hollow Core Concentric Strand					
1000	Open	28.7	30.1	13.4	17.2
1250	Open	29.8	31.3	13.9	17.8
1500	Open	30.8	32.3	14.3	18.5
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	20.8
85°C - Aluminum Conductor - Hollow Core Segmental Strand					
2000	Open	32.4	34.1	15.1	19.5
2250	Open	34.5	36.5	16.2	20.8
2500	Open	35.2	37.2	16.5	21.3
2750	Open	36.0	38.1	16.9	21.7
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 Sun 2 fps
		85°C - Aluminum Conductor - Hollow Core Concentric Strand										
1000	Open	3.523	5.05	1.64	21.96	1.000	2.14	0.19	1.50	0.31	0.75	0.52
1250	Open	3.650	5.05	1.73	17.62	1.000	2.02	0.19	1.45	0.31	0.75	0.52
1500	Open	3.758	5.05	1.82	14.75	1.000	1.92	0.18	1.41	0.31	0.74	0.51
1750	Open	3.885	5.05	1.92	12.72	1.000	1.82	0.17	1.36	0.31	0.74	0.51
2000	Open	3.956	5.05	1.97	11.20	1.000	1.77	0.17	1.34	0.31	0.74	0.51
2250	Open	3.776	5.05	2.43	10.14	1.000	1.45	0.18	1.39	0.31	0.74	0.51
		85°C - Aluminum Conductor - Hollow Core Segmental Strand										
2000	Open	3.953	5.05	1.97	11.03	1.000	1.77	0.17	1.34	0.31	0.74	0.51
2250	Open	3.776	5.05	2.43	9.92	1.000	1.45	0.18	1.39	0.31	0.74	0.51
2500	Open	3.855	5.05	2.49	8.95	1.000	1.41	0.18	1.36	0.31	0.74	0.51
2750	Open	3.950	5.05	2.59	8.16	1.000	1.36	0.17	1.33	0.31	0.73	0.51
3000	Open	4.021	5.05	2.66	7.57	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 - Aluminum Conductor - Hollow Core Concentric Strand					
1000	Open	743	787	483	587	3.8	3.3
1250	Open	849	899	551	669	3.9	3.3
1500	Open	947	1004	613	745	3.9	3.4
1750	Open	1043	1104	673	817	3.9	3.4
2000	Open	1125	1191	725	880	4.0	3.4
2250	Open	1236	1320	795	975	4.6	3.9
		85°C - Aluminum Conductor - Hollow Core Segmental Strand					
2000	Open	1133	1200	730	886	4.0	3.4
2250	Open	1250	1334	804	986	4.6	3.9
2500	Open	1331	1421	855	1048	4.6	3.9
2750	Open	1416	1511	907	1112	4.6	3.9
3000	Open	1486	1586	951	1165	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 - Aluminum 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	15.0	16.7	7.4	10.0
1750	Open	15.8	17.4	7.7	10.4
2000	Open	16.2	17.9	7.9	10.6
2250	Open	17.9	20.1	8.8	12.1
85°C - Aluminum Conductor - Hollow Core Segmental Strand					
2000	Open	16.1	17.9	7.9	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 - Aluminum Conductor - Hollow Core Concentric Strand							
1000	Open	3.523	9.99	1.64	21.96	1.000	2.14	0.19	0.00	0.00	1.07	0.74
1250	Open	3.650	9.99	1.73	17.62	1.000	2.02	0.19	0.00	0.00	1.03	0.72
1500	Open	3.758	9.99	1.82	14.75	1.000	1.92	0.18	0.00	0.00	1.00	0.70
1750	Open	3.885	9.99	1.92	12.72	1.000	1.82	0.17	0.00	0.00	0.97	0.69
2000	Open	3.956	9.99	1.97	11.20	1.000	1.77	0.17	0.00	0.00	0.96	0.68
2250	Open	3.776	9.99	2.43	10.14	1.000	1.45	0.18	0.00	0.00	0.98	0.70
					85°C - Aluminum Conductor - Hollow Core Segmental Strand							
2000	Open	3.953	9.99	1.97	11.03	1.000	1.77	0.17	0.00	0.00	0.96	0.68
2250	Open	3.776	9.99	2.43	9.92	1.000	1.45	0.18	0.00	0.00	0.98	0.70
2500	Open	3.855	9.99	2.49	8.95	1.000	1.41	0.18	0.00	0.00	0.96	0.69
2750	Open	3.950	9.99	2.59	8.16	1.000	1.36	0.17	0.00	0.00	0.94	0.67
3000	Open	4.021	9.99	2.66	7.57	1.000	1.32	0.17	0.00	0.00	0.92	0.66

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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	delta Td for .0027 pf No Sun 0 Ft/s	delta Td for .0027 pf No Sun 2 Ft/s
		85°C - Aluminum Conductor - Hollow Core Concentric Strand					
1000	Open	625	645	462	517	5.8	5.4
1250	Open	710	733	524	587	5.9	5.5
1500	Open	787	814	581	651	6.0	5.6
1750	Open	861	891	634	712	6.2	5.7
2000	Open	925	958	681	766	6.2	5.8
2250	Open	994	1032	724	819	7.4	6.8
		85°C - Aluminum Conductor - Hollow Core Segmental Strand					
2000	Open	932	964	686	771	6.2	5.8
2250	Open	1005	1043	731	828	7.4	6.8
2500	Open	1067	1108	776	878	7.4	6.9
2750	Open	1128	1173	820	929	7.6	7.0
3000	Open	1180	1227	856	971	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 - Aluminum 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	12.3	7.2	8.5
2250	Open	12.4	13.2	7.7	9.2
85°C - Aluminum Conductor - Hollow Core Segmental Strand					
2000	Open	11.6	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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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 Sun 2 fps
		85°C - Aluminum Conductor - Hollow Core Concentric Strand										
1000	Open	3.523	5.05	1.64	21.96	1.000	2.14	0.19	1.19	0.31	0.75	0.51
1250	Open	3.650	5.05	1.73	17.62	1.000	2.02	0.19	1.15	0.31	0.75	0.51
1500	Open	3.758	5.05	1.82	14.75	1.000	1.92	0.18	1.11	0.31	0.75	0.51
1750	Open	3.885	5.05	1.92	12.72	1.000	1.82	0.17	1.08	0.31	0.74	0.51
2000	Open	3.956	5.05	1.97	11.20	1.000	1.77	0.17	1.06	0.31	0.74	0.51
2250	Open	3.776	5.05	2.43	10.14	1.000	1.45	0.18	1.09	0.31	0.74	0.51
		85°C - Aluminum Conductor - Hollow Core Segmental Strand										
2000	Open	3.953	5.05	1.97	11.03	1.000	1.77	0.17	1.06	0.31	0.74	0.51
2250	Open	3.776	5.05	2.43	9.92	1.000	1.45	0.18	1.09	0.31	0.74	0.51
2500	Open	3.855	5.05	2.49	8.95	1.000	1.41	0.18	1.06	0.31	0.74	0.51
2750	Open	3.950	5.05	2.59	8.16	1.000	1.36	0.17	1.04	0.31	0.73	0.51
3000	Open	4.021	5.05	2.66	7.57	1.000	1.32	0.17	1.02	0.31	0.73	0.51

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