

ICEA SINGLE CORE CABLES MV90 Description

The single core cables are designed for distribution of electrical power with nominal voltage U_0/U ranging from 5KV to 46KV and frequency 50Hz. Single core cables are made of stranded copper or aluminium conductor, triple extruding insulating system consisting of thermosetting semi-conducting conductor shield, XLPE/TR-XLPE/EPR insulation and thermosetting semiconducting insulation shield. There are a number of designs of metallic shields including the copper tape helically applied with overlap, copper wire shield, concentric neutral, longitudinally applied corrugated copper tape and metal sheath available, which are surrounded with fillers and grounding conductor, overall binder tape and overall PVC, LSZH or PE jacket.

Standards

National Fire Protection Standard (NEPA 70): National Electric Code

AEIC CS8

ICEA S-93-639 (NEMA WC74), Standard for shielded power cable 5KV-46KV

ICEA S-97-682

IEEE 1202 – Flame Testing of cables for use in cable tray

ICEA T29-520 Vertical

UL 1072 for medium voltage cables.

Construction

Conductor: The conductor consists of uncoated Class B compressed concentric stranded aluminium alloy 1350 or soft drawn annealed copper meeting the requirement of ASTM B3. Unless otherwise specified, the conductor shall be supplied class B as per ASTM B496.

Conductor Shield

Conductor shield consists of extruded thermosetting semi conducting compound which is free stripping from conductor and bonded to the insulation.

Insulation

The insulation is either XLPE or EPR extruded concentrically over the conductor. High dielectric strength tree retardant XLPE (TR-XLPE) can be offered as option to provide an optimum balance of mechanical and electrical properties, insuring resistance to treeing.

100% or 133% insulation level is available upon request. The insulation meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71, and UL 1072.

Insulation Shield

Insulation shield consists of extruded thermosetting semi-conducting compound with controlled adhesion to the insulation, providing required balance between electrical integrity and ease of stripping.

Metallic Shielding

1) Copper Tape

For Copper tape shield, helically bare 5 mil copper tape shield over the insulation shield with minimum overlap of 20%. There are grounding conductor made of bare stranded copper conductor per each interstices, per UL, ICEA and AST

2) Wire Shield

Bare copper wire shield is evenly spaced with 5000 circular mils minimum per inch of core diameter. The shield insures a reliable shield that can be easily terminated.

3) Concentric Neutral

Either bare or tinned copper wire (#6 to #9AWG) is helically applied around the cores.

Assembly

Cables are cabled together with a left hand lay and suitable filler to make the cable round. A binder tape is applied to maintain core geometry and mechanical stability. Fillers may be PP yarn, ramie yarn, plastics or other filler material.

Armour (optional)

For armouring options, inner PVC jacket is applied over the binder type. Corrugated aluminium interlocking armour (AIA) is applied over the inner jacket.

Jacket

A protective sunlight and ozone resistant jacket of PVC is extruded for a tight fit over the welded armour or the core assembly.

Options

- TR-XLPE insulation.
- Compact stranded conductor.
- Super smooth conductor shield.
- Zero or one grounding conductor.
- CPE, LLLPE, LSOH or low temperature PVC jacket.
- Oil resistant jacket.

XLPE INSULATED CABLES MV-90

Wire Shielded Cables

5KV 100% TO ICEA STANDARD

CONDUCTOR	INSULATION THICKNESS (MM/MILS)	SHEATH THICKNESS (MM/MILS)	OVERALL DIAMETER (MM/IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C IN AIR	
					CU	AL	CU	AL	CU	AL		
			(D)		CU	AL			CU	AL	CU	AL
4 AWG	2.29/90	1.52/60	17.5	0.69	430	289	299	201	110	86	145	115
2 AWG	2.29/90	1.52/60	18.8	0.74	573	385	366	246	145	115	190	150
1 AWG	2.29/90	1.52/60	19.8	0.78	670	450	406	273	170	130	225	175
1/0 AWG	2.29/90	1.52/60	20.8	0.82	792	532	460	309	195	150	260	200
2/0 AWG	2.29/90	1.52/60	23.1	0.91	989	665	571	384	220	170	300	230
3/0 AWG	2.29/90	2.03/80	24.6	0.97	1178	792	652	438	250	195	345	270
4/0 AWG	2.29/90	2.03/80	25.9	1.02	1409	947	744	500	290	225	400	310
250 MCM	2.29/90	2.03/80	27.2	1.07	1613	1084	829	557	320	250	445	345
350 MCM	2.29/90	2.03/80	29.7	1.17	2129	1431	1031	693	385	305	550	430
500 MCM	2.29/90	2.03/80	33.5	1.32	2913	1958	1345	904	470	370	695	545
750 MCM	2.29/90	2.03/80	38.6	1.52	4187	2814	1821	1224	585	470	900	710
1000 MCM	2.29/90	2.03/80	42.4	1.67	5426	3647	2267	1524	670	545	1075	855

5kv 133% to ICEA Standard

4 AWG	2.92/115	1.52/60	18.8	0.74	464	312	335	225	120	86	110	115
2 AWG	2.92/115	1.52/60	20.1	0.79	611	411	405	272	155	115	145	150
1 AWG	2.92/115	1.52/60	21.1	0.83	711	478	448	301	180	130	170	175
1/0 AWG	2.92/115	1.52/60	23.1	0.91	884	594	552	371	210	150	200	200
2/0 AWG	2.92/115	1.52/60	24.6	0.97	1038	698	620	417	235	170	225	230
3/0 AWG	2.92/115	2.03/80	25.7	1.01	1226	824	698	469	270	195	270	270

4/0 AWG	2.92/115	2.03/80	27.2	1.07	1461	982	797	536	310	225	305	310
250 MCM	2.92/115	2.03/80	28.4	1.12	1669	1122	884	594	345	250	355	345
350 MCM	2.92/115	2.03/80	31.2	1.23	2192	1473	1094	735	415	305	430	430
500 MCM	2.92/115	2.03/80	35.1	1.38	2983	2005	1413	950	505	370	530	545
750 MCM	2.92/115	2.03/80	39.9	1.57	4261	2864	1895	1274	630	470	665	710
1000 MCM	2.92/115	2.03/80	45.2	1.78	5654	3800	2495	1677	720	545	770	855

15KV 100% TO ICEA STANDARD

CONDUCTOR	INSULATION THICKNESS (MM/ MILS)	SHEATH THICKNESS (MM/ MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C IN AIR	
									CU	AL	CU	AL
			(D)		CU	AL		CU	AL	CU	AL	
2 AWG	4.45/175	2.03/80	24.6	0.97	769	517	562	378	165	130	165	130
1 AWG	4.45/175	2.03/80	25.1	0.99	872	586	610	410	185	145	190	150
1/0 AWG	4.45/175	2.03/80	26.2	1.03	1003	674	671	451	215	165	215	170
2/0 AWG	4.45/175	2.03/80	27.4	1.08	1159	779	741	498	245	190	255	200
3/0 AWG	4.45/175	2.03/80	28.7	1.13	1355	911	829	557	275	215	290	225
4/0 AWG	4.45/175	2.03/80	30.2	1.19	1596	1073	931	626	315	245	330	260
250 MCM	4.45/175	2.03/80	31.8	1.25	1812	1218	1027	690	345	270	365	290
350 MCM	4.45/175	2.03/80	34.8	1.37	2369	1592	1271	854	415	330	440	350
500 MCM	4.45/175	2.03/80	38.1	1.50	3153	2119	1583	1064	500	400	535	430
750 MCM	4.45/175	2.03/80	42.9	1.69	4452	2992	2086	1402	610	490	655	540
1000 MCM	4.45/175	2.79/110	48.8	1.92	5910	3972	2752	1850	690	565	755	640

15kv 133% to ICEA Standard

2 AWG	5.59/220	2.03/80	26.4	1.04	858	577	652	438	165	130	165	130
1 AWG	5.59/220	2.03/80	27.4	1.08	966	649	704	473	185	145	190	150
1/0 AWG	5.59/220	2.03/80	28.4	1.12	1101	740	769	517	215	165	215	170
2/0 AWG	5.59/220	2.03/80	29.7	1.17	1262	848	844	567	245	190	255	200
3/0 AWG	5.59/220	2.03/80	31.2	1.23	1463	983	936	629	275	215	290	225

4/0 AWG	5.59/220	2.03/80	32.5	1.28	1708	1148	1044	702	315	245	330	260
250 MCM	5.59/220	2.03/80	34.0	1.34	1949	1310	1163	782	345	270	365	290
350 MCM	5.59/220	2.03/80	37.1	1.46	2495	1677	1397	939	415	330	440	350
500 MCM	5.59/220	2.03/80	40.4	1.59	3290	2211	1720	1156	500	400	535	430
750 MCM	5.59/220	2.03/80	47.0	1.85	4759	3199	2394	1609	610	490	655	540
1000 MCM	5.59/220	2.79/110	50.8	2.00	6081	4087	2924	1965	690	565	755	640

25KV 100% TO ICEA STANDARD

CONDUCTOR	INSULATION THICKNESS (MM/MILS)	SHEATH THICKNESS (MM/MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C IN AIR	
									CU	AL	CU	AL
			(D)		CU	AL		CU	AL	CU	AL	
1 AWG	6.60/260	2.03/80	29.5	1.16	1056	710	794	534	185	135	190	175
1/0 AWG	6.60/260	2.03/80	31.0	1.22	1196	804	864	581	215	155	215	200
2/0 AWG	6.60/260	2.03/80	31.8	1.25	1357	912	939	631	245	175	255	230
3/0 AWG	6.60/260	2.03/80	33.3	1.31	1586	1066	1058	711	275	200	290	270
4/0 AWG	6.60/260	2.03/80	34.8	1.37	1839	1236	1174	789	315	230	330	310
250 MCM	6.60/260	2.03/80	36.1	1.42	2059	1384	1274	856	345	250	365	345
350 MCM	6.60/260	2.03/80	39.1	1.54	2614	1757	1516	1019	415	305	440	430
500 MCM	6.60/260	2.03/80	42.4	1.67	3417	2297	1848	1242	500	370	535	530
750 MCM	6.60/260	2.79/110	49.0	1.93	4937	3318	2571	1728	610	455	655	685
1000 MCM	6.60/260	2.79/110	53.1	2.09	6244	4197	3087	2075	690	525	755	825

25kv 133% to ICEA Standard

1/0 AWG	8.76/345	2.03/80	35.3	1.39	1443	970	1111	747	215	155	215	200
2/0 AWG	8.76/345	2.03/80	37.1	1.46	1620	1089	1202	808	245	175	255	230
3/0 AWG	8.76/345	2.03/80	38.1	1.50	1830	1230	1302	875	275	200	290	270
4/0 AWG	8.76/345	2.03/80	39.6	1.56	2093	1407	1428	960	315	230	330	310
250 MCM	8.76/345	2.03/80	40.9	1.61	2321	1560	1537	1033	345	250	365	345
350 MCM	8.76/345	2.03/80	45.0	1.77	3035	2040	1937	1302	415	305	440	430

500 MCM	8.76/345	2.03/80	49.0	1.93	3910	2628	2340	1573	500	370	535	530
750 MCM	8.76/345	2.79/110	53.8	2.12	5286	3553	2922	1964	610	455	655	685
1000 MCM	8.76/345	2.79/110	57.7	2.27	6615	4446	3458	2324	690	525	755	825

35KV 100% TO ICEA STANDARD

CONDUCTOR	INSULATION THICKNESS (MM/MILS)	SHEATH THICKNESS (MM/MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C IN AIR	
					(D)	CU	AL	CU	AL	CU	AL	
1/0 AWG	8.76/345	2.03/80	35.3	1.39	1443	970	1111	747	215	165	215	170
2/0 AWG	8.76/345	2.03/80	37.1	1.46	1620	1089	1202	808	245	190	255	200
3/0 AWG	8.76/345	2.03/80	38.1	1.50	1830	1230	1302	875	275	215	290	225
4/0 AWG	8.76/345	2.03/80	39.6	1.56	2093	1407	1428	960	315	245	330	260
250 MCM	8.76/345	2.03/80	40.9	1.61	2321	1560	1537	1033	345	270	365	290
350 MCM	8.76/345	2.03/80	45.0	1.77	3035	2040	1937	1302	415	330	440	350
500 MCM	8.76/345	2.79/110	49.0	1.93	3910	2628	2340	1573	500	400	535	430
750 MCM	8.76/345	2.79/110	53.8	2.12	5286	3553	2922	1964	610	490	655	540
1000 MCM	8.76/345	2.79/110	57.7	2.27	6615	4446	3458	2324	690	565	755	640

35kv 133% to ICEA Standard

1/0 AWG	10.67/420	2.03/80	39.6	1.56	1671	1123	1339	900	215	165	215	170
2/0 AWG	10.67/420	2.03/80	40.6	1.60	1848	1242	1430	961	245	190	255	200
3/0 AWG	10.67/420	2.03/80	42.4	1.67	2070	1391	1543	1037	275	215	290	225
4/0 AWG	10.67/420	2.03/80	45.0	1.77	2483	1669	1820	1223	315	245	330	260
250 MCM	10.67/420	2.03/80	46.2	1.82	2724	1831	1940	1304	345	270	365	290
350 MCM	10.67/420	2.79/110	49.3	1.94	3352	2253	2253	1514	415	330	440	350
500 MCM	10.67/420	2.79/110	52.6	2.07	4208	2828	2639	1774	500	400	535	430
750 MCM	10.67/420	2.79/110	57.7	2.27	5618	3776	3252	2186	610	490	655	540
1000 MCM	10.67/420	2.79/110	61.5	2.42	6967	4683	3810	2561	690	565	755	640

Tape Shielded Cables

5KV 100% TO ICEA STANDARD

CONDUCTOR	INSULATION THICKNESS (MM/MILS)	SHEATH THICKNESS (MM/MILS)	OVERALL DIAMETER (MM/IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C IN AIR	
					CU	AL	CU	AL	CU	AL		
			(D)									
4 AWG	2.29/90	1.52/60	16.5	0.65	466	313	299	201	120	86	110	115
2 AWG	2.29/90	1.52/60	18.0	0.71	613	412	366	246	155	115	145	150
1 AWG	2.29/90	1.52/60	19.1	0.75	713	479	406	273	180	130	175	175
1/0 AWG	2.29/90	1.52/60	20.1	0.79	838	563	460	309	210	150	200	200
2/0 AWG	2.29/90	1.52/60	21.1	0.83	991	666	571	384	235	170	225	230
3/0 AWG	2.29/90	2.03/80	23.4	0.92	1229	826	652	438	270	195	270	270
4/0 AWG	2.29/90	2.03/80	24.9	0.98	1467	986	744	500	310	225	305	310
250 MCM	2.29/90	2.03/80	26.2	1.03	1677	1127	829	557	345	250	355	345
350 MCM	2.29/90	2.03/80	29.0	1.14	2200	1479	1031	693	415	305	430	430
500 MCM	2.29/90	2.03/80	32.5	1.28	2998	2015	1345	904	505	370	530	545
750 MCM	2.29/90	2.03/80	37.3	1.47	4282	2878	1821	1224	630	470	665	710
1000 MCM	2.29/90	2.03/80	41.1	1.62	5533	3719	2267	1524	720	545	770	855
5kv 133% to ICEA Standard												
4 AWG	2.92/115	1.52/60	17.8	0.70	506	340	335	225	120	86	110	115
2 AWG	2.92/115	1.52/60	19.3	0.76	656	441	405	272	155	115	145	150
1 AWG	2.92/115	1.52/60	20.3	0.80	759	510	448	301	180	130	175	175
1/0 AWG	2.92/115	1.52/60	21.3	0.84	885	595	552	371	210	150	200	200
2/0 AWG	2.92/115	1.52/60	23.4	0.92	1091	733	620	417	235	170	225	230
3/0 AWG	2.92/115	2.03/80	24.6	0.97	1284	863	698	469	270	195	270	270
4/0 AWG	2.92/115	2.03/80	26.2	1.03	1525	1025	797	536	310	225	305	310
250 MCM	2.92/115	2.03/80	27.4	1.08	1735	1166	884	594	345	250	355	345
350 MCM	2.92/115	2.03/80	30.2	1.19	2264	1522	1094	735	415	305	430	430
500 MCM	2.92/115	2.03/80	33.8	1.33	3068	2062	1413	950	505	370	530	545
750 MCM	2.92/115	2.03/80	38.6	1.52	4361	2931	1895	1274	630	470	665	710
1000 MCM	2.92/115	2.03/80	42.4	1.67	5621	3778	2495	1677	720	545	770	855

8KV 100% TO ICEA STANDARD

CONDUCTOR	INSULATION THICKNESS (MM/MILS)	SHEATH THICKNESS (MM/MILS)	OVERALL DIAMETER (MM/IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C IN AIR	
					CU	AL	CU	AL	CU	AL		
			(D)									
4 AWG	2.92/115	1.52/60	17.8	0.70	506	340	335	225	115	91	150	115
2 AWG	2.92/115	1.52/60	19.3	0.76	656	441	405	272	155	120	195	150
1 AWG	2.92/115	1.52/60	20.3	0.80	759	510	448	301	175	135	225	175
1/0 AWG	2.92/115	1.52/60	21.3	0.84	885	595	552	371	200	155	260	200
2/0 AWG	2.92/115	1.52/60	23.4	0.92	1091	733	620	417	230	175	300	235
3/0 AWG	2.92/115	1.52/60	24.6	0.97	1284	863	698	469	260	200	345	270
4/0 AWG	2.92/115	1.52/60	26.2	1.03	1525	1025	797	536	295	230	400	310
250 MCM	2.92/115	1.52/60	27.4	1.08	1735	1166	884	594	325	250	445	345
350 MCM	2.92/115	1.91/75	30.2	1.19	2264	1522	1094	735	390	305	550	430
500 MCM	2.92/115	1.91/75	33.8	1.33	3068	2062	1413	950	465	370	685	535
750 MCM	2.92/115	2.16/85	38.6	1.52	4361	2931	1895	1274	565	455	885	700
1000 MCM	2.92/115	2.16/85	42.4	1.67	5621	3778	2495	1677	640	525	1060	840

8kv 133% to ICEA Standard

2 AWG	3.56/140	1.52/60	20.6	0.81	702	472	446	300	195	120	155	150
1 AWG	3.56/140	1.52/60	21.6	0.85	806	542	542	364	225	135	175	175
1/0 AWG	3.56/140	1.52/60	23.6	0.93	985	662	603	405	260	155	200	200
2/0 AWG	3.56/140	1.52/60	24.6	0.97	1144	769	668	449	300	175	230	235
3/0 AWG	3.56/140	1.52/60	25.9	1.02	1341	901	751	505	345	200	260	270
4/0 AWG	3.56/140	1.52/60	27.4	1.08	1583	1064	853	573	400	230	295	310
250 MCM	3.56/140	1.52/60	28.7	1.13	1797	1208	940	632	445	250	325	345
350 MCM	3.56/140	1.91/75	31.5	1.24	2331	1567	1155	776	550	305	390	430
500 MCM	3.56/140	1.91/75	35.1	1.38	3142	2112	1480	995	685	370	465	535
750 MCM	3.56/140	2.16/85	39.9	1.57	4443	2986	1971	1325	885	455	565	700

1000 MCM	3.56/140	2.16/85	45.2	1.78	5856	3936	2590	1741	1060	525	640	840
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15KV 100% TO ICEA STANDARD

CONDUCTOR	INSULATION THICKNESS (MM/ MILS)	SHEATH THICKNESS (MM/ MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C IN AIR	
					CU	AL	CU	AL	CU	AL		
			(D)									
2 AWG	4.45/175	2.03/80	23.4	0.92	820	551	613	412	155	120	195	150
1 AWG	4.45/175	2.03/80	24.4	0.96	928	624	667	448	175	135	225	175
1/0 AWG	4.45/175	2.03/80	25.4	1.00	1062	714	731	491	200	155	260	200
2/0 AWG	4.45/175	2.03/80	26.4	1.04	1224	823	806	542	230	175	300	235
3/0 AWG	4.45/175	2.03/80	27.7	1.09	1422	956	896	602	260	200	345	270
4/0 AWG	4.45/175	2.03/80	29.2	1.15	1669	1122	1006	676	295	230	400	310
250 MCM	4.45/175	2.03/80	30.5	1.20	1887	1268	1102	741	325	250	445	345
350 MCM	4.45/175	2.03/80	33.5	1.32	2455	1650	1357	912	390	305	550	430
500 MCM	4.45/175	2.03/80	36.8	1.45	3248	2183	1680	1129	465	370	685	535
750 MCM	4.45/175	2.03/80	41.7	1.64	4562	3066	2196	1476	565	455	885	700
1000 MCM	4.45/175	2.79/110	47.5	1.87	6027	4051	2870	1929	640	525	1060	840

15kv 133% to ICEA Standard

2 AWG	5.59/220	2.03/80	25.7	1.01	918	617	711	478	155	120	195	150
1 AWG	5.59/220	2.03/80	26.7	1.05	1031	693	768	516	175	135	225	175
1/0 AWG	5.59/220	2.03/80	27.7	1.09	1168	785	836	562	200	155	260	200
2/0 AWG	5.59/220	2.03/80	28.7	1.13	1333	896	915	615	230	175	300	235
3/0 AWG	5.59/220	2.03/80	30.0	1.18	1537	1033	1009	678	260	200	345	270
4/0 AWG	5.59/220	2.03/80	31.5	1.24	1788	1202	1123	755	295	230	400	310
250 MCM	5.59/220	2.03/80	33.3	1.31	2035	1368	1251	841	325	250	445	345
350 MCM	5.59/220	2.03/80	35.8	1.41	2587	1739	1489	1001	390	305	550	430
500 MCM	5.59/220	2.03/80	39.1	1.54	3392	2280	1823	1225	465	370	685	535
750 MCM	5.59/220	2.03/80	45.5	1.79	4868	3272	2502	1682	565	455	885	700

1000 MCM	5.59/220	2.79/110	49.8	1.96	6209	4173	3051	2051	640	525	1060	840
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25KV 100% TO ICEA STANDARD

CONDUCTOR	INSULATION THICKNESS (MM/MILS)	SHEATH THICKNESS (MM/MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C IN AIR	
									CU	AL	CU	AL
			(D)		CU	AL			CU	AL	CU	AL
1 AWG	6.60/260	2.03/80	28.7	1.13	1128	758	866	582	175	135	225	175
1/0 AWG	6.60/260	2.03/80	29.7	1.17	1268	852	936	629	200	155	260	200
2/0 AWG	6.60/260	2.03/80	30.7	1.21	1436	965	1018	684	230	175	300	230
3/0 AWG	6.60/260	2.03/80	32.5	1.28	1669	1122	1143	768	260	200	345	270
4/0 AWG	6.60/260	2.03/80	34.0	1.34	1927	1295	1262	848	295	230	395	310
250 MCM	6.60/260	2.03/80	35.3	1.39	2153	1447	1367	919	325	250	440	345
350 MCM	6.60/260	2.03/80	37.8	1.49	2711	1822	1613	1084	390	305	545	430
500 MCM	6.60/260	2.03/80	41.1	1.62	3526	2370	1956	1315	465	370	680	530
750 MCM	6.60/260	2.79/110	48.0	1.89	5060	3401	2696	1812	565	455	870	685
1000 MCM	6.60/260	2.79/110	51.8	2.04	6375	4285	3218	2163	640	525	1040	825

25kv 133% to ICEA Standard

1/0 AWG	8.76/345	2.03/80	34.5	1.36	1532	1030	1202	808	200	155	260	200
2/0 AWG	8.76/345	2.03/80	35.6	1.40	1709	1149	1291	868	230	175	300	230
3/0 AWG	8.76/345	2.03/80	36.8	1.45	1925	1294	1399	940	260	200	345	270
4/0 AWG	8.76/345	2.03/80	38.4	1.51	2192	1473	1528	1027	295	230	395	310
250 MCM	8.76/345	2.03/80	39.6	1.56	2427	1631	1641	1103	325	250	440	345
350 MCM	8.76/345	2.03/80	42.4	1.67	3002	2018	1904	1280	390	305	545	430
500 MCM	8.76/345	2.03/80	47.5	1.87	4027	2707	2459	1653	465	370	680	530
750 MCM	8.76/345	2.79/110	52.3	2.06	5422	3644	3056	2054	565	455	870	685
1000 MCM	8.76/345	2.79/110	56.1	2.21	6761	4544	3603	2422	640	525	1040	825

35KV 100% TO ICEA STANDARD

CONDUCTOR	INSULATION	SHEATH	OVERALL	CABLE WEIGHT (KG/KM /	AMPACITY (AMPS)
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	THICKNESS (MM/MILS)	THICKNESS (MM/MILS)	DIAMETER (MM / IN.)		LBS/KFT)				90°C IN DUCT		90°C IN AIR	
									CU	AL	CU	AL
			(D)	CU	AL	CU	AL	CU	AL			
1/0 AWG	8.76/345	2.03/80	34.5	1.36	1532	1030	1202	808	200	155	260	200
2/0 AWG	8.76/345	2.03/80	35.6	1.40	1709	1149	1291	868	230	175	300	230
3/0 AWG	8.76/345	2.03/80	36.8	1.45	1925	1294	1399	940	260	200	345	270
4/0 AWG	8.76/345	2.03/80	38.4	1.51	2192	1473	1528	1027	295	230	395	310
250 MCM	8.76/345	2.03/80	39.6	1.56	2427	1631	1641	1103	325	250	440	345
350 MCM	8.76/345	2.03/80	42.4	1.67	3002	2018	1904	1280	390	305	545	430
500 MCM	8.76/345	2.79/110	47.5	1.87	4027	2707	2459	1653	465	370	680	530
750 MCM	8.76/345	2.79/110	52.3	2.06	5422	3644	3056	2054	565	455	870	685
1000 MCM	8.76/345	2.79/110	56.1	2.21	6761	4544	3603	2422	640	525	1040	825
35kV 133% to ICEA Standard												
1/0 AWG	10.67/420	2.03/80	38.4	1.51	1770	1190	1439	967	200	155	260	200
2/0 AWG	10.67/420	2.03/80	39.6	1.56	1953	1313	1535	1032	230	175	300	230
3/0 AWG	10.67/420	2.03/80	40.9	1.61	2177	1463	1650	1109	260	200	345	270
4/0 AWG	10.67/420	2.03/80	42.2	1.66	2450	1647	1785	1200	295	230	395	310
250 MCM	10.67/420	2.03/80	45.2	1.78	2839	1908	2055	1381	325	250	440	345
350 MCM	10.67/420	2.03/80	48.3	1.90	3476	2336	2378	1598	390	305	545	430
500 MCM	10.67/420	2.79/110	51.6	2.03	4343	2919	2775	1865	465	370	680	530
750 MCM	10.67/420	2.79/110	56.1	2.21	5764	3874	3398	2284	565	455	870	685
1000 MCM	10.67/420	2.79/110	59.9	2.36	7124	4788	3966	2666	640	525	1040	825

Concentric Neutral Cables

5KV 100% SINGLE PHASE - FULL NEUTRAL

CONDUCTOR	INSULATION THICKNESS (MM/MILS)	SHEATH THICKNESS (MM/MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C DIRECT BURIED	
			(D)	CU	AL	CU	AL	CU	AL			
2 SOLID	2.29/90	1.52/60	20.1	0.79	848	570	536	360	152	119	215	169

			(D)						DUCT		DIRECT BURIED	
									CU	AL	CU	AL
2 SOLID	2.92/115	2.03/80	21.3	0.84	887	596	574	386	152	119	215	169
2 AWG	2.92/115	2.03/80	22.1	0.87	909	611	598	402	153	120	217	170
1 SOLID	2.92/115	2.03/80	22.1	0.87	1089	732	668	449	175	136	245	193
1 AWG	2.92/115	2.03/80	23.1	0.91	1120	753	695	467	176	138	247	195
1/0 SOLID	2.92/115	2.03/80	23.1	0.91	1296	871	771	518	198	155	277	219
1/0 AWG	2.92/115	2.03/80	24.1	0.95	1329	893	802	539	200	156	280	220
2/0 AWG	2.92/115	2.03/80	25.9	1.02	1650	1109	980	659	231	181	317	251
3/0 AWG	2.92/115	2.03/80	27.2	1.07	1973	1326	1144	769	262	206	359	285
4/0 AWG	2.92/115	2.03/80	29.7	1.17	2422	1628	1415	951	300	237	407	323
250 MCM	2.92/115	2.03/80	31.2	1.23	-	-	1659	1115	-	264	-	358
350 MCM	2.92/115	2.03/80	34.3	1.35	-	-	2090	1405	-	314	-	421
5kV 133% Three Phase - One-Third Neutral												
2 SOLID	2.92/115	2.03/80	21.3	0.84	708	479	504	339	157	123	227	178
2 AWG	2.92/115	2.03/80	22.1	0.87	736	495	530	356	158	123	228	179
1 SOLID	2.92/115	2.03/80	22.1	0.87	824	554	546	367	179	140	256	202
1 AWG	2.92/115	2.03/80	23.1	0.91	853	573	573	385	180	140	256	203
1/0 SOLID	2.92/115	2.03/80	23.1	0.91	980	659	597	401	204	159	286	229
1/0 AWG	2.92/115	2.03/80	24.1	0.95	1012	680	628	422	205	160	287	229
2/0 AWG	2.92/115	2.03/80	25.1	0.99	1198	805	711	478	233	182	320	258
3/0 AWG	2.92/115	2.03/80	26.4	1.04	1439	967	824	554	265	208	353	290
4/0 AWG	2.92/115	2.03/80	27.9	1.10	1742	1171	955	642	301	237	385	323
250 MCM	2.92/115	2.03/80	29.2	1.15	2013	1353	1085	729	330	261	409	348
350 MCM	2.92/115	2.03/80	31.8	1.25	2708	1820	1378	926	393	314	452	399
500 MCM	2.92/115	2.03/80	36.6	1.44	3819	2567	1881	1264	464	381	494	449
750 MCM	2.92/115	2.03/80	41.4	1.63	5613	3773	2592	1742	540	464	552	505
1000MCM	2.92/115	2.79/110	47.8	1.88	7302	4908	3443	2314	586	522	607	541

15KV 100% SINGLE PHASE - FULL NEUTRAL

CONDUCTOR	THICKNESS	HEATH THICKNESS /MILS)	OVERALL (MM / IN.)	DIAMETER	CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
					(D)		CU	AL	90°C IN DUCT		90°C DIRECT BURIED	
									CU	AL	CU	AL
2 SOLID	4.45/175	2.03/80	24.4	0.96	989	665	677	455	157	123	215	169
2 AWG	4.45/175	2.03/80	25.1	0.99	1015	682	704	473	158	124	217	170
1 SOLID	4.45/175	2.03/80	25.1	0.99	1201	807	774	520	181	141	245	193
1 AWG	4.45/175	2.03/80	26.2	1.03	1235	830	805	541	182	143	246	194
1/0 SOLID	4.45/175	2.03/80	26.2	1.03	1410	948	881	592	205	160	277	219
1/0 AWG	4.45/175	2.03/80	26.4	1.07	1448	973	916	616	207	162	279	220
2/0 AWG	4.45/175	2.03/80	29.0	1.14	1779	1196	1104	742	237	183	317	251
3/0 AWG	4.45/175	2.03/80	30.2	1.19	2108	1417	1274	856	270	212	359	284
4/0 AWG	4.45/175	2.03/80	32.8	1.29	2565	1724	1556	1046	307	243	407	323
250 MCM	4.45/175	2.03/80	34.3	1.35	-	-	1806	1214	-	270	-	358
350 MCM	4.45/175	2.03/80	37.8	1.49	-	-	2285	1536	-	321	-	420

15kv 100% Three Phase – One-Third Neutral

2 SOLID	4.45/175	2.03/80	24.4	0.96	815	548	609	409	162	126	223	175
2 AWG	4.45/175	2.03/80	25.1	0.99	842	566	635	427	162	126	224	175
1 SOLID	4.45/175	2.03/80	25.1	0.99	930	625	653	439	184	143	252	199
1 AWG	4.45/175	2.03/80	26.2	1.03	963	647	683	459	184	144	252	199
1/0 SOLID	4.45/175	2.03/80	26.2	1.03	1091	733	707	475	209	163	283	225
1/0 AWG	4.45/175	2.03/80	27.2	1.07	1126	757	742	499	210	163	284	225
2/0 AWG	4.45/175	2.03/80	28.2	1.11	1318	886	830	558	238	186	317	255
3/0 AWG	4.45/175	2.03/80	29.5	1.16	1564	1051	949	638	271	212	351	286
4/0 AWG	4.45/175	2.03/80	31.0	1.22	1873	1259	1086	730	307	241	385	320
250 MCM	4.45/175	2.03/80	32.3	1.27	2150	1445	1221	821	336	265	410	345
350 MCM	4.45/175	2.03/80	35.3	1.39	2894	1945	1559	1048	400	319	457	398

500 MCM	4.45/175	2.03/80	39.6	1.56	3995	2685	2050	1378	471	385	501	451
750 MCM	4.45/175	2.79/110	46	1.81	5820	3912	2883	1938	548	468	559	507
1000 MCM	4.45/175	2.79/110	51.6	2.03	7598	5107	3730	2507	596	529	669	549

15KV 133% SINGLE PHASE - FULL NEUTRAL

	THICKNESS	HEATH THICKNESS M/MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C DIRECT BURIED	
									CU	AL	CU	AL
			(D)		CU		AL		CU	AL	CU	AL
2 SOLID	5.59/220	2.03/80	26.7	1.05	1076	723	763	513	157	123	215	169
2 AWG	5.59/220	2.03/80	27.4	1.08	1104	742	793	533	158	124	217	170
1 SOLID	5.59/220	2.03/80	27.4	1.08	1291	868	863	580	181	141	245	193
1 AWG	5.59/220	2.03/80	28.4	1.12	1329	893	897	603	182	143	246	194
1/0 SOLID	5.59/220	2.03/80	28.4	1.12	1504	1011	973	654	205	160	277	219
1/0 AWG	5.59/220	2.03/80	29.5	1.16	1546	1039	1012	680	207	162	279	220
2/0 AWG	5.59/220	2.03/80	31.2	1.23	1884	1266	1207	811	237	186	317	251
3/0 AWG	5.59/220	2.03/80	32.5	1.28	2217	1490	1379	927	270	212	359	284
4/0 AWG	5.59/220	2.03/80	35.1	1.38	2683	1803	1669	1122	307	243	407	323
250 MCM	5.59/220	2.03/80	37.1	1.46	-	-	1956	1315	-	270	-	358
350 MCM	5.59/220	2.03/80	40.1	1.58	-	-	2416	1624	-	321	-	420

15kv 133% Three Phase – One-Third Neutral

2 SOLID	5.59/220	2.03/80	26.7	1.05	902	606	693	466	162	126	223	175
2 AWG	5.59/220	2.03/80	27.4	1.08	930	625	723	486	162	126	227	175
1 SOLID	5.59/220	2.03/80	27.4	1.08	1019	685	741	498	184	143	252	199
1 AWG	5.59/220	2.03/80	28.4	1.12	1055	709	775	521	184	144	252	199
1/0 SOLID	5.59/220	2.03/80	28.4	1.12	1181	794	799	537	209	163	283	225
1/0 AWG	5.59/220	2.03/80	26.9	1.16	1266	821	838	563	210	163	284	225
2/0 AWG	5.59/220	2.03/80	30.5	1.20	1416	952	928	624	238	186	317	255
3/0 AWG	5.59/220	2.03/80	31.8	1.25	1666	1120	1052	707	271	212	351	286

4/0 AWG	5.59/220	2.03/80	33.3	1.31	1980	1331	1195	803	307	241	385	320
250 MCM	5.59/220	2.03/80	35.1	1.38	2293	1541	1364	917	336	265	410	345
350 MCM	5.59/220	2.03/80	37.6	1.48	3019	2029	1681	1130	400	319	457	398
500 MCM	5.59/220	2.03/80	43.4	1.71	4233	2845	2282	1534	471	385	501	451
750 MCM	5.59/220	2.79/110	48.3	1.90	5984	4022	3040	2043	548	468	559	507
1000 MCM	5.59/220	2.79/110	53.8	2.12	7780	5229	3907	2626	593	529	669	549

25KV 100% SINGLE PHASE - FULL NEUTRAL

CONDUCTOR	INSULATION THICKNESS (MM/MILS)	SHEATH THICKNESS (MM/MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C DIRECT BURIED	
									CU	AL	CU	AL
			(D)		CU	AL		CU	AL	CU	AL	
1 SOLID	6.60/260	2.03/80	29.5	1.16	1379	927	948	637	186	145	245	192
1 AWG	6.60/260	2.03/80	30.5	1.20	1375	954	985	662	187	146	246	194
1/0 SOLID	6.60/260	2.03/80	30.5	1.20	1595	1072	1061	713	210	165	277	218
1/0 AWG	6.60/260	2.03/80	31.5	1.24	1638	1101	1102	741	212	166	279	219
2/0 AWG	6.60/260	2.03/80	58.7	1.31	1983	1333	1302	875	243	190	317	250
3/0 AWG	6.60/260	2.03/80	35.1	1.38	2352	1581	1510	1015	276	217	359	283
4/0 AWG	6.60/260	2.03/80	37.6	1.48	2825	1899	1811	1217	314	248	406	322
250 MCM	6.60/260	2.03/80	39.1	1.54	-	-	2071	1392	-	276	-	356
350 MCM	6.60/260	2.79/110	43.7	1.72	-	-	2636	1772	-	326	-	416

25kv 100% Three Phase – One-Third Neutral

1 SOLID	6.60/260	2.03/80	29.5	1.16	1104	742	826	555	187	146	249	196
1 AWG	6.60/260	2.03/80	30.5	1.20	1143	768	863	580	187	146	249	196
1/0 SOLID	6.60/260	2.03/80	30.5	1.20	1269	853	887	596	213	166	280	222
1/0 AWG	6.60/260	2.03/80	31.5	1.24	1312	882	928	624	213	166	281	222
2/0 AWG	6.60/260	2.03/80	32.5	1.28	1510	1015	1022	687	242	189	314	251
3/0 AWG	6.60/260	2.03/80	34.3	1.35	1794	1206	1180	793	275	216	349	283
4/0 AWG	6.60/260	2.03/80	35.8	1.41	2114	1421	1327	892	311	245	384	317

250 MCM	6.60/260	2.03/80	37.1	1.46	2401	1614	1473	990	341	269	410	343
350 MCM	6.60/260	2.03/80	39.6	1.56	3138	2109	1797	1208	405	322	460	397
500 MCM	6.60/260	2.79/110	45.5	1.79	4368	2936	2415	1623	475	389	504	451
750 MCM	6.60/260	2.79/110	51.1	2.01	6204	4170	3251	2187	556	473	567	513
1000 MCM	6.60/260	2.79/110	55.9	2.20	7948	5342	4071	2736	603	533	620	555

25KV 133% SINGLE PHASE - FULL NEUTRAL

CONDUCTOR	INSULATION THICKNESS (MM/MILS)	SHEATH THICKNESS (MM/MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C DIRECT BURIED	
									CU	AL	CU	AL
			(D)		CU	AL		CU	AL	CU	AL	
1 SOLID	6.60/260	2.03/80	32.8	1.29	1526	1026	1092	734	186	145	245	192
1 AWG	6.60/260	2.03/80	33.5	1.32	1571	1056	1132	761	187	146	246	194
1/0 SOLID	6.60/260	2.03/80	33.5	1.32	1747	1174	1208	812	210	165	277	218
1/0 AWG	6.60/260	2.03/80	35.1	1.38	1827	1228	1285	864	212	166	279	219
2/0 AWG	6.60/260	2.03/80	37.1	1.46	2184	1468	1497	1006	243	190	317	250
3/0 AWG	6.60/260	2.03/80	38.4	1.51	2528	1699	1680	1129	276	217	359	283
4/0 AWG	6.60/260	2.03/80	40.9	1.61	3010	2023	1992	1339	314	248	406	322
250 MCM	6.60/260	2.79/110	43.7	1.72	-	-	2355	1583	-	276	-	356
350 MCM	6.60/260	2.79/110	46.2	1.82	-	-	2846	1913	-	326	-	416

25kv 133% Three Phase – One-Third Neutral

1 SOLID	6.60/260	2.03/80	32.8	1.29	1247	838	970	652	187	146	249	196
1 AWG	6.60/260	2.03/80	33.5	1.32	1290	867	1010	679	187	146	249	196
1/0 SOLID	6.60/260	2.03/80	33.5	1.32	1416	952	1034	695	213	166	280	222
1/0 AWG	6.60/260	2.03/80	35.1	1.38	1495	1005	1111	747	213	166	281	222
2/0 AWG	6.60/260	2.03/80	36.1	1.42	1699	1142	1211	814	242	189	314	251
3/0 AWG	6.60/260	2.03/80	37.3	1.47	1959	1317	1346	905	275	216	349	283
4/0 AWG	6.60/260	2.03/80	38.9	1.53	2287	1537	1500	1008	311	245	384	317
250 MCM	6.60/260	2.03/80	40.4	1.59	2580	1734	1651	1110	341	269	410	343

350 MCM	6.60/260	2.79/110	44.5	1.75	3431	2306	2084	1401	405	322	460	397
500 MCM	6.60/260	2.79/110	48.5	1.91	4590	3085	2630	1768	475	389	504	451
750 MCM	6.60/260	2.79/110	54.1	2.13	6456	4339	3496	2350	556	473	567	513
1000 MCM	6.60/260	2.79/110	58.9	2.32	8219	5524	4335	2914	603	553	620	555

35KV 100% SINGLE PHASE - FULL NEUTRAL

CONDUCTOR	THICKNESS	HEATH THICKNESS /MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C DIRECT BURIED	
									CU	AL	CU	AL
1/0 SOLID	8.76/345	2.03/80	35.3	1.39	1843	1239	1303	876	215	168	276	217
1/0 AWG	8.76/345	2.03/80	36.3	1.43	1895	1274	1352	909	217	169	278	218
2/0 AWG	8.76/345	2.03/80	38.4	1.51	2256	1516	1567	1053	248	194	316	249
3/0 AWG	8.76/345	2.03/80	39.6	1.56	2602	1749	1753	1178	281	220	358	283
4/0 AWG	8.76/345	2.79/110	43.7	1.72	3185	2141	2165	1455	319	252	402	321
250 MCM	8.76/345	2.79/110	45.0	1.77	-	-	2437	1638	-	280	-	353
350 MCM	8.76/345	2.79/110	48.3	1.90	-	-	2935	1973	-	331	-	416

35kv 100% Three Phase – One-Third Neutral

1 SOLID	8.76/345	2.03/80	35.3	1.39	1512	1016	1129	759	216	168	277	219
1/0 AWG	8.76/345	2.03/80	36.3	1.43	1562	1050	1178	792	216	168	278	219
2/0 AWG	8.76/345	2.03/80	37.3	1.47	1768	1188	1281	861	245	191	311	248
3/0 AWG	8.76/345	2.03/80	38.6	1.52	2031	1365	1416	952	278	218	347	280
4/0 AWG	8.76/345	2.03/80	40.1	1.58	2360	1586	1574	1058	314	247	383	314
250 MCM	8.76/345	2.03/80	43.2	1.70	2749	1848	1821	1224	344	271	409	339
350 MCM	8.76/345	2.79/110	45.7	1.80	3516	2363	2168	1457	408	325	461	394
500 MCM	8.76/345	2.79/110	50.5	1.99	4752	3194	2790	1875	480	392	510	452
750 MCM	8.76/345	2.79/110	55.4	2.18	6561	4410	3599	2419	561	476	573	517
1000 MCM	8.76/345	2.79/110	60.2	2.37	8333	5601	4447	2989	609	536	626	560

35KV 100% SINGLE PHASE - FULL NEUTRAL

CONDUCTOR	THICKNESS	HEATH THICKNESS /MILS)	OVERALL DIAMETER (MM / IN.)		CABLE WEIGHT (KG/KM / LBS/KFT)				AMPACITY (AMPS)			
									90°C IN DUCT		90°C DIRECT BURIED	
									CU	AL	CU	AL
			(D)		CU	AL			CU	AL	CU	AL
1/0 SOLID	0.67/420	2.03/80	39.4	1.55	2062	1386	1518	1020	215	168	276	217
1/0 AWG	0.67/420	2.03/80	40.1	1.58	2120	1425	1571	1056	217	169	278	218
2/0 AWG	0.67/420	2.79/110	43.7	1.72	2592	1742	1892	1272	248	194	316	249
3/0 AWG	0.67/420	2.79/110	45.0	1.77	2947	1981	2089	1404	281	220	358	283
4/0 AWG	0.67/420	2.79/110	47.5	1.87	3450	2319	2427	1631	319	252	402	321
250 MCM	0.67/420	2.79/110	49.0	1.93	-	-	2706	1819	-	280	-	353
350 MCM	0.67/420	2.79/110	52.8	2.08	-	-	3293	2213	-	331	-	416

35kv 100% Three Phase – One-Third Neutral

1 SOLID	0.67/420	2.03/80	39.4	1.55	1726	1160	1343	903	216	168	277	219
1/0 AWG	0.67/420	2.03/80	40.1	1.58	1781	1197	1397	939	216	168	278	219
2/0 AWG	0.67/420	2.03/80	41.4	1.63	1994	1340	1506	1012	245	191	311	248
3/0 AWG	0.67/420	2.79/110	44.2	1.74	2361	1587	1747	1174	278	218	347	280
4/0 AWG	0.67/420	2.79/110	45.7	1.80	2702	1816	1915	1287	314	247	383	314
250 MCM	0.67/420	2.79/110	47.0	1.85	3008	2022	2080	1398	344	271	409	339
350 MCM	0.67/420	2.79/110	50.3	1.98	3861	2595	2507	1685	408	325	461	394
500 MCM	0.67/420	2.79/110	54.6	2.15	5060	3401	3090	2077	480	392	510	452
750 MCM	0.67/420	2.79/110	59.2	2.33	6899	4637	3928	2640	561	476	573	517
1000 MCM	0.67/420	2.79/110	64.3	2.53	8698	5846	4803	3228	609	536	626	560