

15kV URD Cable - TR XLPE or EPR 175mil 100% insulation level

■ ALUMINIUM Conductor

Phase Conductor		Copper Neutral		Thickness (mils)				Diameter (mils)			Weight (XLPE) 1000fts(lbs)		Weight (EPR) 1000fts(lbs)		Allowable Ampacities+		
Size AWG or kcmil	No. of Wires	No. of Wires	Wire Size AWG	Cond. Shield	Insul. (Min Avg.)	Insul Shield	Jkt.	Bare Phase Cond.	Over Insul.	Over Jkt	with-out Jacket	comp. cable	with-out Jacket	comp. cable	1/C Duct Buried	1/C Duct Buried	1/C Duct In Air
FULL NEUTRAL																	
2	7	10	14	20	175	40	50	283	695	1003	370	487	455	518	170	115	100
1	19	13	14	20	175	40	50	322	730	1038	437	556	536	600	195	140	123
1/0	19	16	14	20	175	40	50	362	770	1078	510	632	615	680	230	155	135
2/0	19	13	12	20	175	40	50	405	815	1157	616	760	732	810	270	185	162
3/0	19	16	12	20	175	40	50	456	865	1207	730	874	848	927	295	210	184
4/0	19	20	12	20	175	40	50	512	920	1262	875	1030	1009	1090	335	240	210
ONE-THIRD (1/3) NEUTRAL															3/C Direct Buried	3/C Direct Buried	3/C Direct Buried
1/0	19	6	14	20	175	40	50	362	770	1078	373	515	482	547	230	165	145
2/0	19	7	14	20	175	40	50	405	815	1123	434	575	552	630	250	190	167
3/0	19	9	14	20	175	40	50	456	865	1173	510	655	630	709	280	215	189
4/0	19	11	14	20	175	40	50	512	920	1228	598	759	737	818	320	245	215
250	37	13	14	25	175	40	50	558	980	1288	684	889	849	959	345	270	237
350	37	11	12	25	175	60	50	660	1080	1462	913	1175	1112	1253	405	325	285
500	37	16	12	25	175	60	50	789	1210	1562	1207	1498	1442	1590	460	385	338
750	61	15	10	30	175	60	80	968	1400	1884	1685	2057	1959	2149	515	475	417
1000	61	20	10	30	175	80	80	1117	1545	2069	2210	2516	2524	2727	565	540	475

■ COPPER Conductor

Phase Conductor		Copper Neutral		Thickness (mils)				Diameter (mils)			Weight (XLPE) 1000fts(lbs)		Weight (EPR) 1000fts(lbs)		Allowable Ampacities+		
Size AWG or kcmil	No. of Wires	No. of Wires	Wire Size AWG	Cond. Shield	Insul. (Min Avg.)	Insul Shield	Jkt.	Bare Phase Cond.	Over Insul.	Over Jkt	with-out Jacket	comp. cable	with-out Jacket	comp. cable	1/C Duct Buried	1/C Duct Buried	1/C Duct In Air
FULL NEUTRAL																	
2	7	16	14	20	175	40	50	283	695	1003	642	700	677	740	225	160	140
1	19	13	12	20	175	40	50	322	730	1078	804	870	811	875	260	185	162
1/0	19	16	12	20	175	40	50	362	770	1112	923	993	960	1025	295	210	185
2/0	19	20	12	20	175	40	50	405	815	1157	1107	1176	1166	1244	330	240	210
3/0	19	25	12	20	175	40	50	456	865	1207	1334	1402	1398	1477	375	270	237
4/0	19	32	12	20	175	40	50	512	920	1262	1642	1708	1703	1784	430	305	268
ONE-THIRD (1/3) NEUTRAL															3/C Direct Buried	3/C Duct Buried	3/C Duct in Air
1/0	19	9	14	20	175	40	50	362	770	1078	708	777	749	814	290	210	185
2/0	19	11	14	20	175	40	50	405	815	1123	836	907	891	969	320	240	210
3/0	19	14	14	20	175	40	50	456	865	1173	1002	1074	1056	1135	350	275	241
4/0	19	11	12	20	175	40	50	512	920	1262	1227	1317	1267	1348	390	315	276
250	37	13	12	25	175	40	50	558	980	1322	1427	1546	1487	1597	415	340	298
350	37	12	10	25	175	60	50	660	1080	1504	1904	2055	2022	2164	475	415	364
500	37	17	10	25	175	60	50	789	1210	1694	2664	2823	2712	2860	525	480	420
750	61	25	10	30	175	60	80	968	1400	1884	3794	3964	3783	4063	560	530	465
1000	61	33	10	30	175	80	80	1117	1545	2106	4948	5127	5028	5231	600	590	518

+ Ampacities based on earth thermal resistivity of 90°C -cm/watt, 90°C conductor temp., 20°C earth ambient temperature, 75% load factor, and 36" depth of burial. Values are based on one-three phase circuit, on conductor per phase, in adjacent configuration with wires bonded at each end.

* REA bulletin 60-70 (U-1) dated 28/12/1987 requires 175mil insulation thickness for 100% 15kV cable.

15kV URD Cable -TR XLPE or EPR 220mil 133% insulation level

■ ALUMINIUM Conductor

Phase Conductor		Copper Neutral		Thickness (mils)				Diameter (mils)			Weight (XLPE) 1000fts(lbs)		Weight (EPR) 1000fts(lbs)		Allowable Ampacities+		
Size AWG or kcmil	No. of Wires	No. of Wires	Wire Size AWG	Cond. Shield	Insul. (Min Avg.)	Insul Shield	Jkt.	Bare Phase Cond.	Over Insul.	Over Jkt	with-out Jacket	comp. cable	with-out Jacket	comp. cable	1/C Duct Buried	1/C Duct Buried	1/C Duct In Air
FULL NEUTRAL																	
2	7	10	14	20	220	40	50	283	785	1093	415	549	534	603	170	115	100
1	19	13	14	20	220	40	50	322	820	1125	487	619	607	676	195	140	123
1/0	19	16	14	20	220	40	50	362	860	1168	562	697	691	764	230	155	135
2/0	19	13	12	20	220	40	50	405	905	1247	670	830	808	895	270	185	162
3/0	19	16	12	20	220	40	50	456	955	1297	787	946	926	1015	295	210	184
4/0	19	20	12	20	220	60	50	512	1010	1352	934	1148	1135	1228	335	240	210
ONE-THIRD (1/3) NEUTRAL															3/C Direct Buried	3/C Direct Buried	3/C Direct Buried
1/0	19	6	14	20	220	40	50	362	860	1168	441	580	558	631	230	165	145
2/0	19	7	14	20	220	40	50	405	905	1213	490	643	628	715	250	190	167
3/0	19	9	14	20	220	40	50	456	955	1263	567	725	708	797	280	215	189
4/0	19	11	14	20	220	60	50	512	1010	1318	656	8421	863	956	320	245	215
250	37	13	14	25	220	60	50	558	1070	1418	781	013	978	1092	345	270	237
350	37	11	12	25	220	60	50	660	1170	1612	987	1266	1219	1369	405	325	285
500	37	16	12	25	220	60	50	789	1300	1742	1284	1597	1555	1715	460	385	338
750	61	15	10	30	220	60	80	968	1490	1974	1774	2230	2144	2349	515	475	417
1000	61	20	10	30	220	80	80	1117	1635	2159	2301	2718	2667	2882	565	540	475

■ COPPER Conductor

Phase Conductor		Copper Neutral		Thickness (mils)				Diameter (mils)			Weight (XLPE) 1000fts(lbs)		Weight (EPR) 1000fts(lbs)		Allowable Ampacities+		
Size AWG or kcmil	No. of Wires	No. of Wires	Wire Size AWG	Cond. Shield	Insul. (Min Avg.)	Insul Shield	Jkt.	Bare Phase Cond.	Over Insul.	Over Jkt	with-out Jacket	comp. cable	with-out Jacket	comp. cable	1/C Duct Buried	1/C Duct Buried	1/C Duct In Air
FULL NEUTRAL																	
2	7	16	14	20	220	40	50	283	785	1093	695	760	756	825	225	160	140
1	19	13	12	20	220	40	50	322	820	1125	559	633	881	951	260	185	162
1/0	19	16	12	20	220	40	50	362	860	1168	982	1060	1036	1109	295	210	185
2/0	19	20	12	20	220	40	50	405	905	1247	1169	1246	1242	1329	330	240	210
3/0	19	25	12	20	220	40	50	456	955	1297	1399	1475	1476	1565	375	270	237
4/0	19	32	12	20	220	60	50	512	1010	1352	1747	1825	1829	1922	430	305	268
ONE-THIRD (1/3) NEUTRAL															3/C Direct Buried	3/C Duct Buried	3/C Duct in Air
1/0	19	9	14	20	220	40	50	362	860	1168	767	842	749	814	290	210	185
2/0	19	11	14	20	220	40	50	405	905	1213	897	975	891	969	320	240	210
3/0	19	14	14	20	220	40	50	456	955	1263	1066	1145	1056	1135	350	275	241
4/0	19	11	12	20	220	60	50	512	1010	1318	1333	1434	1267	1348	390	315	276
250	37	13	12	25	220	60	50	558	1070	1418	1539	1673	1487	1597	415	340	298
350	37	12	10	25	220	60	50	660	1170	1612	1987	2149	2022	2164	475	415	364
500	37	17	10	25	220	60	50	789	1300	1742	2754	2924	2712	2860	525	480	420
750	61	25	10	30	220	60	80	968	1490	1974	3952	4138	3783	4063	560	530	465
1000	61	33	10	30	220	80	80	1117	1635	2159	5061	5251	5028	5231	600	590	518

+ Ampacities based on earth thermal resistivity of 90°C -cm/watt, 90°C conductor temp., 20°C earth ambient temperature, 75% load factor, and 36" depth of burial. Values are based on one-three phase circuit, on conductor per phase, in adjacent configuration with wires bonded at each end.

* REA bulletin 60-70 (U-1) dated 28/12/1987 requires 220mil insulation thickness for 100% 15kV cable.