

35kV URD Cable - TR XLPE or EPR 345mil 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																	
1/0	19	16	14	20	345	60	50	362	1110	1458	768	957	968	1068	220	165	145
2/0	19	13	12	20	345	60	50	405	1155	1593	885	1105	1105	1224	250	195	170
3/0	19	16	12	20	345	60	50	456	1205	1647	1010	1231	1236	1356	285	220	193
4/0	19	20	12	20	345	60	80	512	1260	1702	1170	1421	1433	1558	325	250	220
ONE-THIRD (1/3) NEUTRAL															3/C Direct Buried	3/C Direct Buried	3/C Direct Buried
1/0	19	6	14	20	345	60	50	362	1110	1458	635	840	835	935	215	165	145
2/0	19	7	14	20	345	60	50	405	1155	1503	703	911	925	1047	245	190	167
3/0	19	9	14	20	345	60	50	456	1205	1613	790	1003	1017	1137	275	215	189
4/0	19	11	14	20	345	60	80	512	1260	1668	890	1120	1161	1286	305	245	215
250	37	13	14	25	345	60	80	558	1335	1743	1005	1305	1301	1484	335	270	238
350	37	11	12	25	345	60	80	660	1435	1877	1225	1584	1558	1752	390	325	280
500	37	16	12	25	345	80	80	789	1565	2047	1599	2001	2004	2214	440	385	338
750	61	15	10	30	345	80	80	968	1755	2279	2125	2623	2590	2850	515	475	417
1000	61	20	10	30	345	80	80	1117	1900	2424	2730	3137	3143	3417	570	535	470

■ 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																	
1/0	19	16	12	20	345	60	50	362	1110	1492	1218	1327	1314	1414	280	215	189
2/0	19	20	12	20	345	60	50	405	1155	1597	1414	1522	1539	1657	310	240	211
3/0	19	25	12	20	345	60	50	456	1205	1647	1653	1760	1785	1905	355	275	241
4/0	19	32	12	20	345	60	80	512	1260	1702	1992	2099	2127	2253	410	315	276
ONE-THIRD (1/3) NEUTRAL															3/C Direct Buried	3/C Duct Buried	3/C Duct in Air
1/0	19	9	14	20	345	60	50	362	1110	1458	999	1102	1103	1222	270	215	189
2/0	19	11	14	20	345	60	50	405	1155	1503	1139	1244	1265	1385	305	240	211
3/0	19	14	14	20	345	60	50	456	1205	1613	1316	1423	1445	1570	340	280	246
4/0	19	11	12	20	345	60	80	512	1260	1702	1576	1707	1690	1875	380	315	276
250	37	13	12	25	345	60	80	558	1335	1777	1799	1971	1940	2134	405	340	298
350	37	12	10	25	345	60	80	660	1435	1919	2269	1474	2470	2680	460	400	350
500	37	17	10	25	345	80	80	789	1565	2089	3117	3337	3273	3534	520	470	412
750	61	25	10	30	345	80	80	968	1755	2279	4300	4531	4505	4777	567	550	483
1000	61	33	10	30	345	80	80	1117	1900	2424	5435	5671	5647	5883	625	615	540

+ 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.