



# 38/66 (72,5) kV

## XLPE Insulated with Cu Wire + Al Tape

Continuous Current Rating for Single Circuit (A)

### COPPER CONDUCTOR

Cross-Sectional Area ( mm <sup>2</sup> )		240	300	400	500	630	800	1000	1200	1600	2000	2500
Direct Buried		545	617	706	805	920	1039	1157	1333	1488	1642	1799
Pipe		522	591	678	776	890	1009	1129	1304	1463	1622	1787
In Air	Trefoil	576	658	762	877	1012	1049	1292	1542	1741	1942	2149
	Flat (S=3D)	715	820	955	1108	1292	1483	1688	1974	2251	2536	2836

HDPE pipe diameter = 2D

### ALUMINIUM CONDUCTOR

Cross-Sectional Area ( mm <sup>2</sup> )		240	300	400	500	630	800	1000	1200	1600	2000	2500
Direct Buried		424	481	554	635	728	830	937	1054	1210	1352	1494
Pipe		406	462	532	612	704	806	913	1031	1189	1335	1482
In Air	Trefoil	449	515	601	697	807	931	1060	1226	1432	1619	1815
	Flat (S=3D)	557	642	752	878	1023	1189	1364	1558	1834	2085	2353

HDPE pipe diameter = 2D



CONDUCTOR (Cu)	Cross-Sectional Area (mm <sup>2</sup> )	240	300	400	500	630	800	1000	1200	1600	2000	2500	
	Shape	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled
	Diameter (mm)	18	20,4	23,45	26,4	30,25	34	39	43,5	49,5	56	63,5	
Thickness of Conductor Screen (mm)		1	1	1	1	1	1	1,4	1,4	1,5	1,6	1,6	
Thickness of Insulation (mm)		11	11	11	10	10	10	10	10	10	10	10	
Thickness of Insulation Screen (mm)		1	1	1	1	1	1	1	1	1	1	1	
Cu-Screen Cross-Sectional Area (mm <sup>2</sup> )		35	50	50	50	50	50	50	70	70	70	95	
Thickness of Outer Sheath (mm)		2,6	2,6	2,7	2,8	2,9	3	3,1	3,3	3,5	3,9	4,1	
Outer Diameter of Cable (mm)		57	59	62	63	67	71	77	83	90	97	106	
Weight of Cable (kg/m)		4,3	5,1	6	7	8,5	10,3	12,6	14,7	18,5	22,7	28,6	
Max. DC Cu Conductor Resistance at 20°C (ohm/km)		0,0754	0,0601	0,047	0,0366	0,0283	0,0221	0,0176	0,0151	0,0113	0,009	0,0072	
Capacitance (microfarad/km)		0,174	0,189	0,207	0,242	0,267	0,291	0,329	0,363	0,403	0,447	0,497	
Inductance (mH/km)		0,414	0,397	0,381	0,360	0,446	0,334	0,323	0,315	0,305	0,297	0,290	

CONDUCTOR (Al)	Cross-Sectional Area (mm <sup>2</sup> )	240	300	400	500	630	800	1000	1200	1600	2000	2500	
	Shape	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled
	Diameter (mm)	18,5	21,1	24,25	27,4	30,6	34,8	39	43,5	50,2	56,5	63,5	
Max. DC Al Conductor Resistance at 20°C (ohm/km)		0,125	0,1	0,0778	0,0605	0,0469	0,0367	0,0291	0,0247	0,0186	0,0149	0,0127	
Weight of Cable (kg/m)		2,9	3,3	3,8	4,1	4,6	5,4	6,3	7,4	9	10,6	12,9	