



# 220/380 (420) kV

## XLPE Insulated with Lead Sheath

Continuous Current Rating for Single Circuit (A)

### COPPER CONDUCTOR

Cross-Sectional Area ( mm <sup>2</sup> )		800	1000	1200	1600	2000	2500	3000
Direct Buried		1009	1124	1292	1440	1589	1798	2015
Pipe		1000	1115	1283	1437	1590	1808	2036
In Air	Trefoil	1161	1303	1532	1729	1929	2200	2487
	Flat (S=3D)	1392	1593	1862	2116	2382	2738	3138

HDPE pipe diameter = 2D

### ALUMINIUM CONDUCTOR

Cross-Sectional Area ( mm <sup>2</sup> )		800	1000	1200	1600	2000	2500	3000
Direct Buried		805	909	1021	1170	1307	1444	1649
Pipe		799	901	1013	1167	1308	1451	1666
In Air	Trefoil	934	1061	1214	1415	1599	1789	2060
	Flat (S=3D)	1115	1287	1471	1721	1957	2203	2560

HDPE pipe diameter = 2D



CONDUCTOR (Cu)	Cross-Sectional Area (mm <sup>2</sup> )	800	1000	1200	1600	2000	2500	3000
	Shape		Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled
Diameter (mm)		34	39	43,5	49,5	56	63,5	71
Thickness of Conductor Screen (mm)		1,8	1,4	1,4	1,5	1,6	1,6	1,6
Thickness of Insulation (mm)		30	28	27	27	27	27	27
Thickness of Insulation Screen (mm)		1,2	1,2	1,2	1,2	1,2	1,2	1,2
Thickness of Lead Sheath (mm)		3,7	3,7	3,7	3,9	4,2	4,4	4,7
Thickness of Outer Sheath (mm)		4,6	4,6	4,6	4,9	5,2	5,5	5,8
Outer Diameter of Cable (mm)		120	120	123	131	138	148	158
Weight of Cable (kg/m)		29,9	31,6	34,1	39,9	46,7	55,1	65,3
Max. DC Cu Conductor Resistance at 20°C (ohm/km)		0,0221	0,0176	0,0151	0,0113	0,009	0,0072	0,006
Capacitance (microfarad/km)		0,135	0,151	0,168	0,182	0,2	0,22	0,241
Inductance (mH/km)		0,438	0,411	0,394	0,38	0,364	0,355	0,343

CONDUCTOR (Al)	Cross-Sectional Area (mm <sup>2</sup> )	800	1000	1200	1600	2000	2500	3000
	Shape		Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled
Diameter (mm)		34,8	39	43,5	50,2	56,5	63,5	71
Max. DC Al Conductor Resistance at 20°C (ohm/km)		0,0367	0,0291	0,0247	0,0186	0,0149	0,0127	0,0099
Weight of Cable (kg/m)		22,8	25,1	26,6	30,6	34,5	39,4	40,7