


Single-core Cable for 345/200 (362) kV with Copper wire screen and Lead sheath		XDRCU-PBT
Cable layout <ul style="list-style-type: none"> Copper conductor, round stranded or segmented optionally with longitudinal water barrier Inner semiconductive layer firmly bonded to the XLPE insulation XLPE main insulation, cross-linked Outer semiconductive layer firmly bonded to the XLPE insulation Copper wire screen as short-circuit current carrying component with semi-conductive swelling tapes above and below as longitudinal water barrier Extruded Lead sheath as radial diffusion barrier Thermoplastic oversheath as mechanical protection optionally with semi-conductive and/or flame-retardant layer 	Features of metallic sheath <ul style="list-style-type: none"> Robust seamless construction 100% impervious to moisture Long-term proven design Production process The inner semiconductive layer, the XLPE main insulation and the outer semiconductive layer are extruded in a single operation applying a dry curing and a water or nitrogen cooling method.	
		Applicable standards IEC 62067 AEIC CS9 ANSI / ICEA S-108-720

Technical data

Copper conductor cross-section		Outer diameter (approx.)	Cable weight (approx.)	Capacitance	Impedance (90°C, 50 Hz) ...	Impedance (90°C, 50 Hz) ..	Surge impedance ..	Min. bending radius	Max. pulling force
mm ²	kcmil	mm	kg/m	µF/km	Ω/km	Ω/km	Ω	mm	kN
400	800	112	24	0.11	0.24	0,16	58	2200	24
500	1000	112	25	0.12	0.23	0,15	56	2200	30
630	1250	113	26	0.13	0.22	0,14	53	2240	38
800	1600	113	28	0.15	0.21	0,13	49	2240	48
1000	2000	116	31	0.17	0.19	0,12	45	2300	60
1200	2400	117	33	0.19	0.19	0,12	43	2320	72
1400	2750	117	34	0.20	0.18	0,11	41	2340	84
1600	3200	121	37	0.20	0.18	0,11	40	2400	96
2000	4000	130	43	0.21	0.17	0,10	39	2600	120
2500	5000	137	51	0.26	0.17	0,09	35	2760	150

Ampacity

		Directly buried ..	Directly buried ...	In ducts ..	In ducts ...	In free air ..	In free air ...	In ductbank ...	Directly buried ..
Ambient temp.		20°C	20°C	20°C	20°C	35°C	35°C	15°C	40°C
Soil resistivity		1.0 Km/W	1.0 Km/W	1.0 Km/W	1.0 Km/W	-	-	0.8/1.0 Km/W	1.4 Km/W
mm ²	kcmil	A	A	A	A	A	A	A	A
400	800	671	728	658	688	816	885	734	495
500	1000	768	839	754	792	954	1043	845	562
630	1250	864	949	850	895	1090	1200	956	630
800	1600	969	1077	957	1013	1260	1403	1084	700
1000	2000	1139	1265	1121	1189	1518	1698	1276	816
1200	2400	1226	1371	1212	1287	1664	1878	1383	873
1400	2750	1312	1475	1330	1395	1803	2048	1498	931
1600	3200	1397	1578	1446	1502	1942	2217	1613	988
2000	4000	1546	1752	1600	1668	2191	2524	1793	1091
2500	5000	1695	1926	1754	1833	2439	2830	1973	1194

Calculation basis:

Conductor temperature 90°C, 50 Hz, load factor 1.0, laying depth 1200 mm, phase distance at flat formation 30 cm
 Earthing method: Single-Point Bonding or Cross-bonding

Note:

Values apply for cables with rated voltages from 330 kV to 345 kV acc. to IEC 62067

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