


<b>Single-core Cable for 345/200 (362) kV</b> <b>with Copper wire screen and Aluminum laminated sheath</b>		<b>XDRCU-ALT</b>
<b>Cable layout</b> <ul style="list-style-type: none"> <li>Copper conductor, round stranded or segmented optionally with longitudinal water barrier</li> <li>Inner semiconductive layer firmly bonded to the XLPE insulation</li> <li>XLPE main insulation, cross-linked</li> <li>Outer semiconductive layer firmly bonded to the XLPE insulation</li> <li>Copper wire screen as short-circuit current carrying component with semi-conductive swelling tapes above and below as longitudinal water barrier</li> <li>Aluminum foil, overlapped as radial diffusion barrier laminated to the oversheath</li> <li>Thermoplastic oversheath as mechanical protection optionally with semi-conductive and/or flame-retardant layer</li> </ul>	<b>Features of metallic sheath</b> <ul style="list-style-type: none"> <li>Low weight</li> <li>Low losses</li> <li>Low cost</li> <li>Internationally proven design</li> </ul> <b>Production process</b> 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.	
		<b>Applicable standards</b> 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 <sup>2</sup>	kcmil	mm	kg/m	µF/km	Ω/km	Ω/km	Ω	mm	kN
400	800	104	15	0.11	0.24	0,16	58	2300	24
500	1000	104	16	0.12	0.23	0,15	56	2300	30
630	1250	104	17	0.13	0.22	0,14	53	2300	38
800	1600	104	18	0.15	0.20	0,13	48	2300	48
1000	2000	108	21	0.17	0.19	0,12	45	2400	60
1200	2400	108	24	0.19	0.19	0,12	43	2450	72
1400	2750	109	25	0.20	0.18	0,11	41	2450	84
1600	3200	113	28	0.20	0.18	0,11	40	2600	96
2000	4000	123	33	0.21	0.17	0,10	39	2700	120
2500	5000	130	38	0.26	0.17	0,09	35	2700	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 <sup>2</sup>	A	A	A	A	A	A	A	A	
kcmil	A	A	A	A	A	A	A	A	
400	800	667	728	657	688	811	884	733	491
500	1000	757	830	747	784	934	1024	836	555
630	1250	859	953	852	898	1090	1211	960	625
800	1600	962	1077	957	1012	1247	1398	1083	694
1000	2000	1132	1132	1121	1187	1504	1691	1247	810
1200	2400	1218	1372	1210	1286	1648	1870	1381	866
1400	2750	1308	1475	1301	1382	1785	2039	1486	925
1600	3200	1386	1579	1391	1478	1922	2208	1591	979
2000	4000	1532	1626	1572	1655	2165	2513	1788	1083
2500	5000	1673	1673	1753	1832	2408	2817	1971	1177

### 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

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

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