

# XDRCU-ALT Single-core Cable 330/190 (362) kV

330/190 kV

with Copper wire screen and Aluminium laminated sheath

### Construction

- Copper conductor, round stranded or segmented, optionally with longitudinal water barrier
- Inner semi-conductive layer firmly bonded to the XLPE insulation
- XLPE main insulation, cross-linked
- Outer semi-conductive layer firmly bonded to the XLPE insulation
- Copper wire screen with semi-conductive swelling tapes above and below as longitudinal water barrier
- Aluminium foil, overlapped and glued as radial diffusion barrier bonded to the overshath
- Thermoplastic overshath as mechanical protection, optionally with semi-conductive and/or flame-retardant layer

### Remarks

The inner semi-conductive layer, the XLPE main insulation and the outer semi-conductive layer are extruded in a single operation applying a dry curing and a water or nitrogen cooling method.

### Features

- Low weight
- Low losses
- Low cost
- Internationally proven design
- Suitable for most applications

### Standards

IEC 62067  
ICEA S-108-720  
AEIC CS9-06



### Technical data

Conductor cross-section	Outer diameter (approx.)	Cable weight (approx.)	AC resistance	AC resistance	Reactance	Reactance	Capacitance	Min. bending radius	Max. pulling force
mm <sup>2</sup>	mm	kg/m	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\mu\text{F}}{\text{km}}$	mm	kN
500	112	16	48.7	48.4	151	227	0.113	2300	30
630	113	17	38.8	38.3	141	218	0.129	2300	38
800	113	18	31.7	31.0	133	209	0.148	2300	48
1000	114	20	26.8	25.8	126	201	0.165	2300	60
1200	116	22	20.4	20.1	120	194	0.192	2400	72
1400	120	24	17.8	17.4	116	188	0.204	2400	84
1600	122	26	15.9	15.5	114	185	0.219	2500	96
2000	128	30	13.3	12.8	112	180	0.224	2600	120
2500	136	36	11.4	10.8	109	173	0.239	2800	150

### Capacity

Installation Amb. temp. Soil resist. Load factor	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\text{m}\Omega}{\text{km}}$	$\frac{\text{m}\Omega}{\text{km}}$
	1.0	1.0	0.7	0.7	-	-	-
Cross-section mm <sup>2</sup>	A	A	A	A	A	A	A
500	762	831	899	963	924	1008	
630	865	953	1028	1111	1070	1181	
800	967	1078	1159	1267	1226	1371	
1000	1063	1197	1282	1416	1374	1557	
1200	1223	1373	1484	1633	1619	1829	
1400	1315	1485	1602	1775	1769	2014	
1600	1389	1580	1698	1895	1893	2169	
2000	1519	1742	1862	2096	2096	2422	
2500	1645	1909	2027	2310	2321	2714	

Calculation basis: Conductor temperature: 90°C, Frequency: 50 Hz, 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