

High Voltage 60 - 500 kV



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HV Cables

XDRCU-ALT Single-core Cable 500/290 (550) kV

500/290 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 oversheath
- Thermoplastic oversheath 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



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 ²	mm	kg/m	mΩ/km	mΩ/km	mΩ/km	mΩ/km	μF/km	mm	kN
800	124	19.9	31.6	31.0	139	209	0.130	2500	48
1000	126	21.6	26.7	25.9	130	200	0.148	2600	60
1200	128	23.6	20.3	20.1	126	194	0.165	2600	72
1400	131	25.9	17.7	17.4	122	188	0.176	2700	84
1600	132	27.5	15.9	15.5	118	185	0.191	2700	96
2000	136	31.7	13.2	12.8	116	180	0.201	2800	120
2500	144	37.1	11.3	10.6	110	171	0.225	2900	150

Capacity

Installation Amb. temp. Soil resist. Load factor							
	1.0	1.0	0.7	0.7	-	-	-
Cross-section mm ²	A	A	A	A	A	A	A
800	946	1036	1128	1213	1197	1326	1326
1000	1038	1150	1247	1356	1350	1518	1518
1200	1187	1310	1432	1552	1575	1765	1765
1400	1274	1414	1545	1684	1720	1940	1940
1600	1343	1501	1634	1793	1842	2096	2096
2000	1465	1654	1790	1985	2044	2348	2348
2500	1583	1815	1948	2201	2283	2663	2663

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

XDRCU-ALT Single-core Cable 380/220 (420) kV

380/220 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 oversheath
- Thermoplastic oversheath 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



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 ²	mm	kg/m	mΩ/km	mΩ/km	mΩ/km	mΩ/km	μF/km	mm	kN
630	111	16	38.8	38.3	141	218	0.129	2300	38
800	112	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	118	22	20.4	20.1	121	194	0.186	2400	72
1400	122	24	17.8	17.4	117	188	0.199	2500	84
1600	128	27	15.9	15.5	117	185	0.201	2600	96
2000	132	31	13.3	12.8	114	180	0.212	2700	120
2500	136	36	11.4	10.8	109	173	0.239	2800	150

Capacity

Installation Amb. temp. Soil resist. Load factor						
	1.0	1.0	0.7	0.7	-	-
Cross-section mm ²	A	A	A	A	A	A
630	857	945	1019	1102	1046	1176
800	958	1069	1148	1257	1219	1365
1000	1050	1185	1266	1403	1366	1550
1200	1207	1355	1463	1612	1605	1813
1400	1297	1465	1579	1751	1754	1995
1600	1373	1555	1673	1861	1870	2131
2000	1499	1716	1835	2062	2075	2389
2500	1618	1883	1993	2278	2304	2700

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 380 kV to 400 kV acc. to IEC 62067

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 oversheath
- Thermoplastic oversheath 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 ²	mm	kg/m	 mΩ/km	 mΩ/km	 mΩ/km	 mΩ/km	μF/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						
Cross-section mm ²	1.0	1.0	0.7	0.7	-	-
	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

XDRCU-ALT Single-core Cable

220/127 (245) kV

220/127 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 oversheath
- Thermoplastic oversheath 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
AIEC 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 ²	mm	kg/m	mΩ/km	mΩ/km	mΩ/km	mΩ/km	μF/km	mm	kN
400	96	12	61.6	60.2	148	234	0.124	2000	24
500	97	13	48.9	47.0	141	227	0.136	2000	30
630	97	14	39.0	36.5	132	218	0.156	2000	38
800	101	16	31.9	28.8	126	209	0.173	2100	48
1000	104	18	27.0	23.2	120	201	0.193	2100	60
1200	108	20	20.4	20.1	115	194	0.220	2200	72
1400	111	22	17.8	17.4	111	188	0.239	2300	84
1600	115	25	16.0	15.5	110	185	0.249	2300	96
2000	119	29	13.4	12.8	107	180	0.263	2400	120
2500	126	34	11.5	10.8	104	173	0.287	2600	150

Capacity

Installation Amb. temp. Soil resist. Load factor Cross-section mm ²						
	20 °C 1.0 Km/W				35 °C in air	
	1.0	1.0	0.7	0.7	-	-
	A	A	A	A	A	A
400	678	744	802	862	818	899
500	769	849	915	989	942	1043
630	872	972	1044	1140	1090	1221
800	976	1098	1176	1296	1245	1411
1000	1072	1219	1299	1448	1395	1602
1200	1240	1397	1510	1670	1647	1877
1400	1333	1514	1631	1818	1802	2072
1600	1410	1610	1729	1937	1924	2224
2000	1540	1780	1895	2150	2134	2497
2500	1668	1954	2064	2374	2365	2808

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 220 kV to 230 kV acc. to IEC 62067

XDRCU-ALT Single-core Cable 132/76 (145) kV

132/76 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 oversheath
- Thermoplastic oversheath 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 60840
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 ²	mm	kg/m	 mΩ/km	 mΩ/km	 mΩ/km	 mΩ/km	μF/km	mm	kN
240	73	7.8	97.2	97.0	147	250	0.134	1500	14
300	74	8.3	78.0	77.7	140	243	0.149	1500	18
400	75	9.3	61.8	61.3	132	234	0.169	1500	24
500	76	10.0	49.2	48.4	126	227	0.189	1600	30
630	78	12.0	39.4	38.3	119	218	0.216	1600	38
800	83	13.0	32.4	31.0	114	209	0.240	1700	48
1000	86	15.0	27.7	25.8	108	201	0.274	1800	60
1200	92	18.0	20.6	20.1	105	194	0.303	1900	72
1400	96	20.0	18.0	17.4	103	188	0.325	2000	84
1600	100	22.0	16.2	15.5	101	185	0.338	2100	96
2000	105	26.0	13.6	12.8	100	180	0.348	2200	120
2500	112	31.0	11.7	10.8	96	173	0.381	2300	150

Capacity

Installation Amb. temp. Soil resist. Load factor						
	1.0	1.0	0.7	0.7	-	-
Cross-section mm ²	A	A	A	A	A	A
240	531	588	629	680	627	696
300	600	667	713	775	718	801
400	683	765	818	894	832	937
500	774	873	931	1025	958	1088
630	876	997	1061	1180	1107	1273
800	978	1126	1191	1340	1263	1474
1000	1072	1251	1312	1499	1413	1978
1200	1250	1431	1536	1723	1681	1959
1400	1344	1549	1657	1873	1837	2160
1600	1421	1647	1756	1996	1962	2320
2000	1552	1820	1923	2212	2171	2600
2500	1679	1999	2089	2445	2405	2932

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 132 kV to 138 kV acc. to IEC 60840

XDRCU-ALT Single-core Cable 110/64 (123) kV

110/64 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 oversheath
- Thermoplastic oversheath 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 60840
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 ²	mm	kg/m	 mΩ/km	 mΩ/km	 mΩ/km	 mΩ/km	μF/km	mm	kN
240	71	7.6	97.2	97.0	146	250	0.139	1500	14
300	72	8.1	78.1	77.7	139	243	0.155	1500	18
400	73	9.1	61.8	61.3	131	234	0.177	1500	24
500	75	10.0	49.2	48.4	125	227	0.196	1500	30
630	76	11.0	39.5	38.3	118	218	0.227	1600	38
800	77	13.0	32.7	31.0	109	209	0.287	1600	48
1000	81	15.0	27.9	25.8	105	201	0.313	1700	60
1200	87	17.0	20.6	20.1	102	194	0.369	1800	72
1400	91	19.0	18.1	17.4	99	188	0.393	1900	84
1600	95	21.0	16.3	15.5	98	185	0.405	1900	96
2000	99	25.0	13.7	12.8	96	180	0.430	2000	120
2500	104	30.0	11.9	10.8	92	173	0.506	2100	150

Capacity

Installation Amb. temp. Soil resist. Load factor						
	1.0	1.0	0.7	0.7	-	-
Cross-section mm ²	A	A	A	A	A	A
240	531	590	630	682	628	699
300	600	670	715	777	719	805
400	683	767	819	898	834	942
500	774	875	933	1029	960	1093
630	876	1001	1063	1185	1109	1280
800	979	1136	1196	1358	1268	1499
1000	1070	1260	1315	1515	1418	1704
1200	1252	1443	1545	1744	1693	1996
1400	1345	1562	1665	1895	1851	2201
1600	1422	1660	1763	2018	1975	2363
2000	1552	1836	1929	2241	2188	2658
2500	1675	2022	2096	2485	2426	3018

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 110 kV to 115 kV acc. to IEC 60840

XDRCU-ALT Single-core Cable 500/290 (550) kV

500/290 kV

with Copper wire screen and Aluminium laminated sheath

Construction

- Aluminium 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 oversheath
- Thermoplastic oversheath 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

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

Standards

IEC 62067



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 ²	mm	kg/m	mΩ/km	mΩ/km	mΩ/km	mΩ/km	μF/km	mm	kN
800	124	15	49.3	48.8	139	209	0.130	2500	24
1000	124	15	40.2	39.5	132	203	0.144	2500	30
1200	126	16	35.1	34.3	127	197	0.157	2600	36
1400	132	17	27.6	27.5	122	188	0.176	2700	42
1600	132	18	24.3	24.2	119	185	0.191	2700	48
2000	136	20	19.6	19.5	116	180	0.201	2800	60
2500	142	21	17.0	16.8	111	173	0.220	2900	75

Capacity

Installation Amb. temp. Soil resist. Load factor							
	1.0	1.0	0.7	0.7	-	-	-
Cross-section mm ²	A	A	A	A	A	A	A
800	754	825	898	966	962	1058	1058
1000	840	928	1006	1092	1093	1215	1215
1200	903	1005	1087	1188	1196	1339	1339
1400	1025	1132	1241	1348	1390	1552	1552
1600	1090	1211	1325	1447	1502	1688	1688
2000	1211	1353	1478	1623	1696	1921	1921
2500	1307	1468	1603	1772	1875	2142	2142

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

XDRCU-ALT Single-core Cable 380/220 (420) kV

380/220 kV

with Copper wire screen and Aluminium laminated sheath

Construction

- Aluminium 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 oversheath
- Thermoplastic oversheath 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

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

Standards

IEC 62067



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 ²	mm	kg/m	mΩ/km	mΩ/km	mΩ/km	mΩ/km	μF/km	mm	kN
630	112	13	61.9	61.5	141	217	0.131	2300	19
800	112	13	49.4	48.8	133	209	0.148	2300	24
1000	114	14	40.3	39.5	127	203	0.163	2300	30
1200	116	14	35.2	34.3	123	197	0.176	2400	36
1400	122	16	27.6	27.5	117	188	0.199	2500	42
1600	126	17	24.3	24.2	116	185	0.207	2600	48
2000	130	18	19.7	19.5	113	180	0.219	2600	60
2500	136	20	17.0	16.8	109	173	0.239	2800	75

Capacity

Installation Amb. temp. Soil resist. Load factor			20 °C 1.0 Km/W				35 °C in air	
Cross-section mm ²	A	A		A	A	A		A
630	678	742		806	866	849		933
800	766	845		917	993	980		1088
1000	854	950		1028	1123	1113		1248
1200	919	1029		1111	1222	1217		1375
1400	1046	1161		1271	1387	1418		1596
1600	1116	1241		1359	1487	1528		1725
2000	1241	1389		1518	1669	1726		1963
2500	1340	1508		1648	1824	1908		2190

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 380 kV to 400 kV acc. to IEC 62067

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

330/190 kV

with Copper wire screen and Aluminium laminated sheath

Construction

- Aluminium 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 oversheath
- Thermoplastic oversheath 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

- Very 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 ²	mm	kg/m	 mΩ/km	 mΩ/km	 mΩ/km	 mΩ/km	μF/km	mm	kN
500	113	13	78.9	78.7	151	227	0.113	2300	15
630	113	13	61.9	61.5	141	217	0.131	2300	19
800	113	13	49.4	48.8	133	209	0.148	2300	24
1000	114	13	40.3	39.5	127	203	0.163	2300	30
1200	115	14	35.2	34.3	122	197	0.178	2300	36
1400	120	25	27.6	27.5	116	188	0.204	2400	42
1600	124	16	24.3	24.2	115	185	0.214	2500	48
2000	129	18	19.7	19.5	112	180	0.224	2600	60
2500	136	20	17.0	16.8	109	173	0.239	2800	75

Capacity

Installation Amb. temp. Soil resist. Load factor						
	20 °C 1.0 Km/W				35 °C in air	
Cross-section mm ²	1.0	1.0	0.7	0.7	-	-
	A	A	A	A	A	A
500	597	647	704	750	728	792
630	683	747	812	872	853	936
800	773	852	925	1001	985	1092
1000	863	958	1039	1132	1119	1253
1200	928	1039	1122	1234	1224	1383
1400	1058	1174	1287	1404	1429	1609
1600	1129	1256	1377	1505	1540	1740
2000	1256	1405	1537	1690	1738	1978
2500	1358	1526	1670	1845	1919	2199

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

XDRCU-ALT Single-core Cable

220/127 (245) kV

220/127 kV

with Copper wire screen and Aluminium laminated sheath

Construction

- Aluminium 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 oversheath
- Thermoplastic oversheath 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

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

Standards

IEC 62067
ICEA S-108-720
AIEC 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 ²	mm	kg/m	 mΩ/km	 mΩ/km	 mΩ/km	 mΩ/km	μF/km	mm	kN
400	97	10	101.0	101.0	147	232	0.126	2000	12
500	97	10	78.9	78.7	141	227	0.136	2000	15
630	98	10	62.0	61.5	132	217	0.158	2000	19
800	101	11	49.5	48.8	126	209	0.173	2100	24
1000	103	12	40.5	39.5	121	203	0.190	2100	30
1200	106	13	35.5	34.3	117	197	0.208	2200	36
1400	111	14	27.6	27.5	111	188	0.238	2300	42
1600	115	15	24.4	24.2	110	185	0.248	2300	48
2000	119	16	19.8	19.5	107	180	0.263	2400	60
2500	126	18	17.1	16.8	104	173	0.285	2600	75

Capacity

Installation Amb. temp. Soil resist. Load factor Cross-section mm ²						
	20 °C 1.0 Km/W				35 °C in air	
	1.0	1.0	0.7	0.7	-	-
	A	A	A	A	A	A
400	531	581	629	674	645	706
500	606	665	720	774	743	819
630	694	767	831	900	871	969
800	785	873	945	1030	1003	1125
1000	876	982	1060	1165	1139	1290
1200	944	1065	1148	1270	1246	1423
1400	1079	1207	1320	1449	1459	1656
1600	1153	1293	1412	1555	1571	1790
2000	1283	1450	1577	1751	1776	2040
2500	1389	1579	1716	1919	1962	2275

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 220 kV to 230 kV acc. to IEC 62067

XDRCU-ALT Single-core Cable 132/76 (145) kV

132/76 kV

with Copper wire screen and Aluminium laminated sheath

Construction

- Aluminium 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 oversheath
- Thermoplastic oversheath 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

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

Standards

IEC 60840
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 ²	mm	kg/m	 mΩ/km	 mΩ/km	 mΩ/km	 mΩ/km	μF/km	mm	kN
240	74	6.3	161.0	161.0	146	249	0.136	1500	7.2
300	74	6.4	129.0	129.0	140	242	0.150	1500	9.0
400	77	6.8	101.0	101.0	132	232	0.169	1600	12.0
500	77	6.9	79.1	78.7	126	227	0.189	1600	15.0
630	79	7.4	62.3	61.5	119	217	0.219	1600	19.0
800	83	8.3	49.9	48.8	114	209	0.240	1700	24.0
1000	86	8.8	41.0	39.5	109	203	0.271	1800	30.0
1200	90	9.7	36.0	34.3	106	197	0.289	1800	36.0
1400	97	11.0	27.7	27.5	103	188	0.325	2000	42.0
1600	101	12.0	24.5	24.2	101	185	0.338	2100	48.0
2000	106	14.0	19.9	19.5	100	180	0.349	2200	60.0
2500	112	15.0	17.3	16.8	96	173	0.381	2300	75.0

Capacity

Installation Amb. temp. Soil resist. Load factor Cross-section mm ²						
	1.0	1.0	0.7	0.7	-	-
	A	A	A	A	A	A
240	414	458	490	529	491	544
300	467	519	556	602	560	624
400	537	598	642	699	656	735
500	612	685	736	805	757	855
630	700	788	848	934	887	1011
800	791	897	963	1068	1022	1174
1000	883	1009	1079	1208	1159	1350
1200	950	1093	1165	1313	1265	1487
1400	1093	1237	1346	1496	1490	1727
1600	1167	1325	1440	1605	1606	1867
2000	1298	1485	1607	1805	1812	2124
2500	1404	1619	1746	1979	2004	2375

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 132 kV to 138 kV acc. to IEC 60840

XDRCU-ALT Single-core Cable 110/64 (123) kV

110/64 kV

with Copper wire screen and Aluminium laminated sheath

Construction

- Aluminium 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 oversheath
- Thermoplastic oversheath 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

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

Standards

IEC 60840
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 ²	mm	kg/m	 mΩ/km	 mΩ/km	 mΩ/km	 mΩ/km	μF/km	mm	kN
240	72	6.1	161.0	161.0	144	249	0.141	1500	7.2
300	72	6.2	129.0	129.0	138	242	0.156	1500	9.0
400	74	6.4	101.0	101.0	130	232	0.181	1500	12.0
500	75	6.8	79.2	78.7	125	227	0.196	1500	15.0
630	78	7.2	62.4	61.5	117	217	0.230	1600	19.0
800	78	7.7	50.1	48.8	109	209	0.287	1600	24.0
1000	81	8.3	41.2	39.5	105	203	0.318	1700	30.0
1200	85	9.0	36.3	34.3	102	197	0.345	1700	36.0
1400	91	10.0	27.8	27.5	99	188	0.393	1900	42.0
1600	95	11.0	24.5	24.2	98	185	0.405	1900	48.0
2000	100	13.0	20.0	19.5	96	180	0.432	2000	60.0
2500	105	14.0	17.4	16.8	92	173	0.506	2100	75.0

Capacity

Installation Amb. temp. Soil resist. Load factor						
	1.0	1.0	0.7	0.7	-	-
Cross-section mm ²	A	A	A	A	A	A
240	415	460	492	532	492	546
300	468	521	558	605	562	627
400	538	601	645	704	658	741
500	613	687	738	808	759	858
630	702	792	851	938	889	1016
800	794	905	969	1082	1027	1194
1000	883	1018	1083	1223	1165	1371
1200	949	1103	1169	1330	1272	1512
1400	1095	1248	1355	1515	1503	1759
1600	1169	1336	1448	1624	1620	1901
2000	1302	1499	1617	1829	1830	2171
2500	1406	1637	1756	2012	2028	2444

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 110 kV to 115 kV acc. to IEC 60840

Subject to change without notice

20250627-1



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