

3.6/6KV Power Cables Single Core Cables to IEC 60502

Single Core 3.6/6KV (Um=7.2KV) Dimensional Data

Nom.Cross-Section Area				Unarmoured Cables				Aluminium Wire Armoured Cables					
	Nom. Insulation Thickness	Copper Tape Thickness	Copper Wire Screen Area*	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight		Nom. Bedding Thickness	Armour Wire Size	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight	
						CU	AL					CU	AL
mm ²	mm	mm	mm ²	mm	mm	kg/km		mm	mm	mm	mm	kg/km	
10	2.5	0.1	16	1.8	16	320	260	1.2	1.6	1.8	22	610	550
16	2.5	0.1	16	1.8	16	390	290	1.2	1.6	1.8	22	680	580
25	2.5	0.1	16	1.8	18	500	340	1.2	1.6	1.8	23	810	660
35	2.5	0.1	16	1.8	19	610	400	1.2	1.6	1.8	24	940	730
50	2.5	0.1	16	1.8	20	750	450	1.2	1.6	1.8	26	1100	810
70	2.5	0.1	16	1.8	22	970	550	1.2	1.6	1.8	27	1350	930
95	2.5	0.1	16	1.8	23	1250	660	1.2	1.6	1.9	29	1670	1080
120	2.5	0.1	16	1.8	25	1500	760	1.2	1.6	1.9	31	1950	1200
150	2.5	0.1	25	1.8	26	1790	860	1.2	1.6	2.0	32	2270	1350
185	2.5	0.1	25	1.8	28	2150	1000	1.2	2.0	2.1	35	2770	1620
240	2.6	0.1	25	1.9	31	2770	1250	1.2	2.0	2.2	38	3440	1930
300	2.8	0.1	25	2.0	34	3400	1500	1.2	2.0	2.2	41	4120	2210
400	3.0	0.1	35	2.1	38	4280	1850	1.3	2.5	2.4	46	5250	2820
500	3.2	0.1	35	2.1	41.5	5325	2240	1.4	2.5	2.6	50	6520	3520

630	3.2	0.1	35	2.2	45.3	6745	2750	1.5	2.5	2.7	56	7960	4020
800	3.2	0.1	50	2.4	49.9	8290	3310	1.5	2.5	2.8	59	9660	4820
1000	3.2	0.1	50	2.5	54.2	10255	3990	1.6	2.5	3.0	63	11690	5540

*Optional wire screen can be provided in combination of copper tapes. Nominal screen area, as stated in the table, can be supplied as standard.

Electrical Data

Nom. Cross-Section Area	D C Resistance CU / AL	A C Resistance CU / AL	Short Circuit Rating of Conductor CU / AL 1 sec	Capacitance	Charging Current	Short Circuit Rating of Copper Wire Screen 1 sec	Short Circuit Rating of Copper Tape Screen 1 sec	Reactance		Inductance		Impedance			
								Trefoil	Flat Spaced	Trefoil	Flat Spaced	Trefoil		Flat Spaced	
												CU	AL	CU	AL
mm ²	μΩ/m	μΩm	kA	pF/m	mA/m	kA	kA	μΩ/m		nH/m		μΩ/ m		μΩ/ m	
10	1830/3080	2330/3920	1.4/0.9	202	0.26	2.6	0.4	160	214	420	610	2332	3846	2345	3840
16	1150/1910	1460/2420	2.2/1.4	232	0.29	2.6	0.4	152	205	410	600	1462	2411	1478	2421
25	727/1200	927/1538	3.6/2.3	262	0.32	2.6	0.4	142	196	400	590	936	1544	952	1554
35	524/868	668/1113	5.0/3.2	291	0.35	2.6	0.5	133	187	390	580	679	1121	695	1131
50	387/641	494/822	6.8/4.4	321	0.39	2.6	0.5	121	179	380	570	511	834	527	844
70	268/443	343/568	9.8/6.3	371	0.45	2.6	0.6	115	173	370	550	364	583	386	597
95	193/320	248/410	13.3/8.5	417	0.50	2.6	0.6	110	168	350	540	272	427	300	446
120	153/253	196/325	17.2/11.0	459	0.55	2.6	0.7	107	165	340	520	225	345	257	367
150	124/206	159/265	21.2/13.5	494	0.59	4.3	0.7	103	161	330	510	193	287	229	313
185	99.1/164	128/211	26.6/17.0	543	0.65	4.3	0.8	100	158	320	500	165	237	206	267
240	75.4/125	98/161	34.9/22.3	583	0.70	4.3	0.9	97	155	310	490	140	191	185	226

300	60.1/100	80/130	43.8/28.0	602	0.72	4.3	1.0	95	153	300	490	126	163	174	203
400	47.0/77.8	64/102	57.3/36.6	627	0.75	5.8	1.1	92	150	290	480	113	141	164	184
500	36.6/60.5	51/81	72.3/46.2	654	0.79	5.8	1.2	90	147	290	470	105	124	158	171
630	28.3/46.9	42/64	91.2/58.3	726	0.87	5.8	1.3	87	145	280	460	97	110	151	160
800	22.1/36.7	35/55	114.4/75.0	786	0.91	8.2	1.4	85	143	270	460	92	101	147	153
1000	17.6/29.1	30/46	143.0/94.0	856	0.99	8.2	1.5	83	141	260	450	88	95	144	148