

## 8.7/15KV Power Cables Single Core Cables to IEC 60502

### Single Core 8.7/15KV (Um=17.5KV) 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
mm <sup>2</sup>	mm	mm	mm <sup>2</sup>	mm	mm	kg/km		mm	mm	mm	mm	kg/km
25	4.5	0.1	16	1.8	22	640	480	1.2	1.6	1.8	28	1020
35	4.5	0.1	16	1.8	23	760	540	1.2	1.6	1.9	29	1170
50	4.5	0.1	16	1.8	24	900	610	1.2	1.6	1.9	30	1340
70	4.5	0.1	16	1.8	26	1140	710	1.2	1.6	2.0	32	1610
95	4.5	0.1	16	1.8	27	1420	830	1.2	2.0	2.1	35	2020
120	4.5	0.1	16	1.9	29	1700	950	1.2	2.0	2.1	36	2310
150	4.5	0.1	25	1.9	31	1990	1070	1.2	2.0	2.2	38	2660
185	4.5	0.1	25	2.0	32	2380	1230	1.2	2.0	2.2	39	3070
240	4.5	0.1	25	2.1	35	3010	1490	1.2	2.0	2.3	42	3750
300	4.5	0.1	25	2.1	37	3620	1720	1.3	2.5	2.4	46	4590
400	4.5	0.1	35	2.2	41	4490	2070	1.3	2.5	2.5	49	5550
500	4.5	0.1	35	2.3	43	5460	2460	1.3	2.5	2.6	52	6590
630	4.5	0.1	35	2.4	48	6790	2590	1.4	2.5	2.7	57	8060
800	4.5	0.1	50	2.6	52	8420	3570	1.5	2.5	2.8	61	9800
1000	4.5	0.1	50	2.7	55	10330	4180	1.6	2.5	3.0	65	10850

\*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 <sup>2</sup>	μΩ/m	μΩm	kA	pF/m	mA/m	kA	kA	μΩ/m		nH/m		μΩ/ m		μΩ/ m	
25	727/1200	927/1538	3.6/2.3	171	0.47	2.6	0.6	150	210	480	680	936	1544	952	1554
35	524/868	668/1113	5.0/3.2	187	0.51	2.6	0.6	141	207	460	660	679	1121	695	1131
50	387/641	494/822	6.8/4.4	204	0.57	2.6	0.7	138	195	440	640	511	834	527	844
70	268/443	343/568	9.8/6.3	232	0.63	2.6	0.7	132	188	420	600	364	583	386	597
95	193/320	248/410	13.3/8.5	258	0.71	2.6	0.8	126	182	400	580	272	427	300	446
120	153/253	196/325	17.2/11.0	281	0.74	2.6	0.8	119	179	380	570	225	345	257	367
150	124/206	159/265	21.2/13.5	301	0.79	4.3	0.9	113	176	360	560	193	287	229	313
185	99.1/164	128/211	26.6/17.0	329	0.87	4.3	0.9	110	170	350	540	165	237	206	267
240	75.4/125	98/161	34.9/22.3	363	0.96	4.3	1.0	107	166	340	530	140	191	185	226
300	60.1/100	80/130	43.8/28.0	398	1.03	4.3	1.1	104	160	330	510	126	163	174	203
400	47.0/77.8	64/102	57.3/36.6	439	1.17	5.8	1.2	97	157	310	500	113	141	164	184
500	36.6/60.5	51/81	72.3/46.2	483	1.28	5.8	1.3	94	154	300	490	105	124	158	171
630	28.3/46.9	42/64	91.2/58.3	534	1.42	5.8	1.4	91	151	290	480	97	110	151	160

800	22.1/36.7	35/55	114.4/75.0	590	1.61	8.2	1.4	91	147	290	470	92	101	147	153
1000	17.6/29.1	30/46	143.0/94.0	640	1.75	8.2	1.5	88	144	280	460	88	95	144	148