

1.8/3KV Power Cables Single Core Cables to IEC 60502

Single Core 1.8/3KV (Um=3.6KV) Dimensional Data

Nom. Cross-Section Area				Unarmoured Cables				Steel 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	2.0	0.1	16	1.8	13	240	180	1.2	1.6	1.8	18	460	400
16	2.0	0.1	16	1.8	13	300	200	1.2	1.6	1.8	19	530	430
25	2.0	0.1	16	1.8	15	410	250	1.2	1.6	1.8	20	650	500
35	2.0	0.1	16	1.8	16	510	300	1.2	1.6	1.8	21	780	560
50	2.0	0.1	16	1.8	17	640	350	1.2	1.6	1.8	22	930	640
70	2.0	0.1	16	1.8	19	850	440	1.2	1.6	1.8	24	1170	750
95	2.0	0.1	16	1.8	20	1130	540	1.2	1.6	1.8	26	1460	870
120	2.0	0.1	16	1.8	22	1370	630	1.2	1.6	1.8	27	1730	990
150	2.0	0.1	25	1.8	23	1650	730	1.2	1.6	1.8	29	2030	1110
185	2.0	0.1	25	1.8	25	2010	860	1.2	1.6	1.9	30	2430	1280
240	2.0	0.1	25	1.8	27	2570	1050	1.2	1.6	2.0	33	3040	1530
300	2.0	0.1	25	1.8	29	3160	1250	1.2	2.0	2.1	36	3760	1860
400	2.0	0.1	35	1.9	33	3980	1560	1.2	2.0	2.2	39	4660	2230
500	2.2	0.1	35	2.1	35.5	4910	1905	1.3	2.5	2.5	43	5930	2930

630	2.4	0.1	35	2.2	39.7	6340	2420	1.4	2.5	2.6	49	7370	3430
800	2.6	0.1	50	2.3	44.5	7890	2980	1.4	2.5	2.7	52	9070	4230
1000	2.8	0.1	50	2.5	49.4	9890	3700	1.5	2.5	2.9	56	11100	4950

*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	182	0.27	2.6	0.2	151	201	384	558	2332	3846	2332	3840
16	1150/1910	1460/2420	2.2/1.4	201	0.29	2.6	0.3	140	193	362	546	1462	2411	1478	2420
25	727/1200	927/1538	3.6/2.3	222	0.32	2.6	0.3	131	185	345	535	936	1544	952	1554
35	524/868	668/1113	5.0/3.2	251	0.35	2.6	0.4	122	178	327	524	679	1121	695	1131
50	387/641	494/822	6.8/4.4	281	0.39	2.6	0.4	116	172	313	514	511	834	527	844
70	268/443	343/568	9.8/6.3	341	0.45	2.6	0.5	110	165	300	495	364	583	386	597
95	193/320	248/410	13.3/8.5	397	0.50	2.6	0.5	104	160	287	485	272	427	300	446
120	153/253	196/325	17.2/11.0	430	0.55	2.6	0.6	104	159	283	480	225	345	257	367
150	124/206	159/266	21.2/13.5	464	0.59	4.3	0.6	100	156	280	475	193	287	229	313
185	99.1/164	128/211	26.6/17.0	513	0.65	4.3	0.7	98	154	274	465	165	237	206	267

240	75.4/125	98/161	34.9/22.3	573	0.70	4.3	0.9	94	150	267	459	140	191	185	226
300	60.1/100	80/130	43.8/28.0	652	0.72	4.3	1.0	91	147	260	455	128	163	174	203
400	47.0/77.8	64/102	57.3/36.6	727	0.75	5.8	1.1	90	147	253	445	113	141	164	184
500	36.6/60.5	51/81	72.3/46.2	754	0.79	5.8	1.2	89	145	248	435	105	124	158	171
630	28.3/46.9	42/64	91.2/58.3	786	0.87	5.8	1.3	86	143	245	425	97	110	151	160
800	22.1/36.7	35/55	114.4/75.0	846	0.91	8.2	1.4	85	142	243	415	92	101	147	153
1000	17.6/29.1	30/46	143.0/94.0	916	0.99	8.2	1.5	83	141	239	405	88	95	144	148