

3.6/6KV Power Cables Three Cores Cables to IEC 60502

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

Nom. Cross-Section Area	Nom. Insulation Thickness	Copper Tape Thickness	Copper Wire Screen Area*	Unarmoured Cables				Steel Round-Wire Armoured Cables					
				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	2.0	30	980	790	1.2	2.0	2.1	36	2310	2120
16	2.5	0.1	16	2.0	31	1190	890	1.2	2.0	2.2	38	2600	2290
25	2.5	0.1	16	2.1	34	1560	1080	1.2	2.0	2.3	41	3080	2600
35	2.5	0.1	16	2.2	37	1930	1270	1.3	2.5	2.4	45	3950	3280
50	2.5	0.1	16	2.3	40	2370	1480	1.3	2.5	2.5	47	4530	3630
70	2.5	0.1	16	2.4	43	3110	1820	1.4	2.5	2.6	51	5510	4210
95	2.5	0.1	16	2.5	47	4000	2200	1.5	2.5	2.8	55	6660	4860
120	2.5	0.1	16	2.6	50	4820	2550	1.5	2.5	2.9	59	7630	5360
150	2.5	0.1	25	2.8	54	5770	2970	1.6	2.5	3.0	62	8800	6000
185	2.5	0.1	25	2.9	58	6960	3460	1.6	2.5	3.1	66	10180	6670
240	2.6	0.1	25	3.1	65	8940	4340	1.8	3.15	3.4	75	13480	8870
300	2.8	0.1	25	3.3	70	10980	5190	1.9	3.15	3.6	81	15920	10130
400	3.0	0.1	35	3.5	79	13820	6440	2.0	3.5	3.9	90	19980	12590
500	3.2	0.1	35	3.7	87	19100	10755	2.1	3.5	4.1	98	24160	14820

630	3.2	0.1	35	4.0	95	30470	13150	2.2	3.5	4.4	107	29650	17710
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*Optional wire screen can be provided in combination of copper tapes. Nominal screen area, as stated in the table, can be supplied as standard.

Nom. Cross-Section Area	Steel Flat Wire Armoured Cables						Double Steel Tape Armoured Cables					
	Nom. Bedding Thickness	Armour Wire Size	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight		Nom. Bedding Thickness	No of Steel tapes x nom tape thickness	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight	
					CU	AL					CU	AL
mm ²	mm	mm	mm	mm	kg/km		mm	mm	mm	mm	kg/km	
10	1.2	0.8	1.8	26.9	1415	1235	1.2	2X0.2	1.8	26	1060	885
16	1.2	0.8	1.8	29.2	1725	1445	1.2	2X0.2	1.8	28.3	1340	1055
25	1.2	0.8	1.9	32.2	2165	1735	1.2	2X0.2	1.9	31.3	1735	1305
35	1.3	0.8	2.0	35.0	2645	2025	1.3	2X0.2	2.0	34.1	2170	1555
50	1.3	0.8	2.1	37.4	3075	2295	1.3	2X0.5	2.1	38.0	2950	2170
70	1.4	0.8	2.2	41.0	3915	2755	1.4	2X0.5	2.3	41.8	3795	2635
95	1.5	0.8	2.3	45.3	4840	3335	1.5	2X0.5	2.4	46.1	4810	3200
120	1.5	0.8	2.4	48.7	5915	3855	1.5	2X0.5	2.5	49.5	5770	3705
150	1.6	0.8	2.5	52.1	6930	4395	1.6	2X0.5	2.6	52.9	6775	4235
185	1.6	0.8	2.6	56.2	8265	5100	1.6	2X0.5	2.8	57.2	8120	4950
240	1.8	0.8	2.8	62.2	10440	6220	1.8	2X0.5	2.9	63.0	10250	6025
300	1.9	0.8	3.0	68.2	12780	7420	1.9	2X0.5	3.1	69.0	12570	7200
400	2.0	0.8	3.3	75.9	15970	9110	2.0	2X0.5	3.4	76.7	15740	8870
500	2.1	0.8	3.5	84.2	19940	11130	2.1	2X0.8	3.6	86.5	20550	11750
630	2.2	0.8	3.7	93.5	25120	13670	2.2	2X0.8	3.9	96.0	25830	14400

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 Per Core 1 sec	Short Circuit Rating of Copper Tape Screen Per Core 1 sec	Reactance	Inductance
mm ²	μΩ/m	μΩ/m	kA	pF/m	mA/m	kA	kA	μΩ/m	nH/m
10	1830/3080	2330/3920	1.4/0.9	212	0.27	2.6	0.4	132	410
16	1150/1910	1470/2420	2.2/1.4	242	0.30	2.6	0.4	124	390
25	727/1200	927/1538	3.6/2.3	272	0.33	2.6	0.4	116	370
35	524/868	668/1113	5.0/3.2	301	0.36	2.6	0.5	108	350
50	387/641	494/822	6.8/4.4	332	0.40	2.6	0.5	102	330
70	268/443	343/568	9.8/6.3	383	0.46	2.6	0.6	97	310
95	193/320	248/410	13.3/8.5	432	0.52	2.6	0.6	92	290
120	153/253	196/325	17.2/11.0	474	0.57	2.6	0.7	89	280
150	124/206	159/265	21.2/13.5	511	0.61	4.3	0.7	87	280
185	99.1/164	128/211	26.6/17.0	562	0.67	4.3	0.8	86	270
240	75.4/125	98/161	34.9/22.3	602	0.72	4.3	0.9	83	260
300	60.1/100	80/130	43.8/28.0	622	0.75	4.3	1.0	82	260
400	47.0/77.8	64/102	57.3/36.6	648	0.78	5.8	1.1	80	250
500	36.6/60.5	51/81	72.3/46.2	668	0.82	5.8	1.2	78	250
630	28.3/46.9	42/64	91.2/58.3	758	0.92	5.8	1.3	76	240

