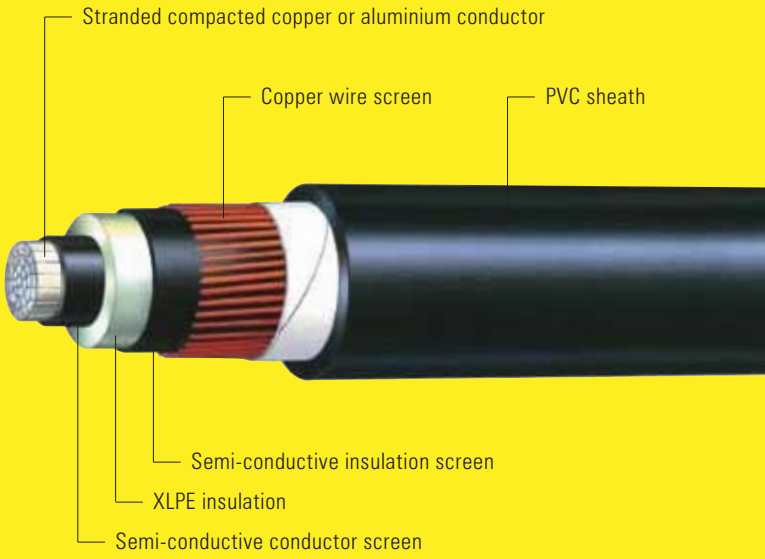
gle Core

3.8/6.6 to 19/33kV



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3.8/6.6kV Single Core Screened & PVC Sheathed

Copper Conductors, up to 10kA Fault Level

Nominal conductor area	Nominal conductor diameter	Nominal insulation thickness	Nominal diameter over insulation	Nominal screen area on each core	Number and nominal diameter of screen wires	Nominal diameter over wire screen	Nominal overall diameter	Approx. mass	Product code	Max. pulling tension	Min. bending radius		Nominal duct diameter	
											During pulling	Set in position		
mm^2	mm	mm	mm	mm^2	no/mm	mm	mm	kg/100m		kN	mm	mm	mm	mm
16	4.8	2.5	11.0	15.9	28/0.85	14.3	18.4	54	XHHP15AA001	1.1	330	220	50	65
25	5.8	2.5	12.0	24.4	43/0.85	15.3	19.4	72	XHHP17AA001	1.8	350	230	50	65
35	6.8	2.5	13.0	34.4	24/1.35	17.3	21.4	93	XHHP18AA001	2.5	380	260	50	65
50	8.0	2.5	14.1	48.7	34/1.35	18.4	22.5	120	XHHP19AA001	3.5	410	270	50	65
70	9.6	2.5	15.7	68.1	30/1.70	20.7	25.0	160	XHHP20AA001	4.9	450	300	50	80
95	11.5	2.5	17.6	68.1	30/1.70	22.6	26.9	190	XHHP22AA001	6.7	480	320	50	80
120	13.1	2.5	19.2	68.7	48/1.35	23.5	27.6	215	XHHP23AA001	8.4	500	330	50	80
150	14.5	2.5	20.6	68.7	48/1.35	24.9	29.0	245	XHHP24AA001	11	520	350	50	100
185	16.1	2.5	22.2	68.7	48/1.35	26.5	30.8	275	XHHP25AA001	13	550	370	63	100
240	18.5	2.6	24.9	68.7	48/1.35	29.2	33.7	335	XHHP26AA001	17	610	400	63	100
300	20.7	2.8	27.6	68.7	48/1.35	31.9	36.6	400	XHHP27AA001	21	660	440	63	100
400	23.6	3.0	30.9	68.7	48/1.35	35.2	40.2	500	XHHP28AA001	28	720	480	65	150

Note: For larger sizes use 6.35/11kV cables

Current Ratings

Nominal conductor area	Continuous current-carrying capacity, A												Fault current carrying capacity for 1 second	
	In air					In ground			In underground ducts					
mm^2	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Cond. kA	Screen kA
16	113	133	104	110	79	116	118	113	102	103	101	91	2.29	2.36
25	146	172	135	143	102	148	150	145	130	131	128	116	3.57	3.62
35	180	211	166	176	123	178	179	174	155	155	153	139	5.00	5.09
50	214	250	198	210	146	208	208	204	180	178	179	164	7.15	7.22
70	266	307	248	264	182	251	248	249	215	211	216	202	10.0	10.1
95	322	370	301	321	219	297	291	296	252	245	255	241	13.6	10.1
120	366	418	344	367	247	334	324	335	282	271	287	273	17.1	10.2
150	412	467	389	415	285	369	355	373	310	296	318	309	21.4	10.2
185	467	524	443	474	322	411	391	419	344	325	356	348	26.4	10.2
240	543	600	521	558	373	466	437	481	388	361	407	400	34.3	10.2
300	614	668	595	636	436	515	477	537	428	394	454	460	42.9	10.2
400	698	748	684	732	495	570	521	604	471	429	507	518	57.2	10.2

Electrical Characteristics

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C		Inductive reactance at 50Hz and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Charging current per phase	Dielectric loss per phase	Maximum dielectric stress	Screen DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
		Trefoil or flat touching	Flat spaced	Trefoil touching	Flat touching	Flat spaced								
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	μF/km	A/km	W/km	kV/mm	Ohm/km	Ohm/km	Ohm/km
16	1.15	1.47	1.47	0.155	0.170	0.216	11000	0.221	0.263	4.00	2.06	1.14	2.29	0.0842
25	0.727	0.927	0.927	0.146	0.161	0.207	9700	0.248	0.296	4.50	1.99	0.739	1.47	0.0770
35	0.524	0.668	0.668	0.142	0.157	0.203	8700	0.276	0.330	5.01	1.93	0.525	1.05	0.0732
50	0.387	0.494	0.494	0.135	0.150	0.196	7800	0.308	0.368	5.59	1.87	0.371	0.758	0.0678
70	0.268	0.342	0.342	0.130	0.145	0.191	6900	0.352	0.420	6.39	1.82	0.265	0.533	0.0632
95	0.193	0.247	0.247	0.120	0.135	0.181	6000	0.404	0.482	7.33	1.77	0.266	0.459	0.0551
120	0.153	0.196	0.195	0.113	0.128	0.174	5400	0.447	0.534	8.11	1.74	0.263	0.416	0.0506
150	0.124	0.160	0.159	0.110	0.125	0.171	5000	0.486	0.580	8.81	1.72	0.263	0.388	0.0480
185	0.0991	0.128	0.127	0.107	0.122	0.168	4600	0.530	0.632	9.61	1.69	0.263	0.363	0.0455
240	0.0754	0.0982	0.0973	0.103	0.119	0.164	4200	0.576	0.687	10.4	1.61	0.263	0.339	0.0430
300	0.0601	0.0792	0.0781	0.102	0.117	0.163	4000	0.597	0.713	10.8	1.49	0.263	0.325	0.0420
400	0.0470	0.0632	0.0618	0.0982	0.113	0.159	3800	0.627	0.749	11.4	1.38	0.263	0.312	0.0394

3.8/6.6kV Single Core Screened & PVC Sheathed

Aluminium Conductors, up to 10kA Fault Level

Nominal conductor area	Nominal conductor diameter	Nominal insulation thickness	Nominal diameter over insulation	Nominal screen area on each core	Number and nominal diameter of screen wires	Nominal diameter over wire screen	Nominal overall diameter	Approx. mass	Product code	Max. pulling tension	Min. bending radius		Nominal duct diameter	
											During pulling	Set in position		
mm^2	mm	mm	mm	mm^2	no/mm	mm	mm	kg/100m		kN	mm	mm	mm	mm
35	6.9	2.5	13.0	22.7	40/0.85	16.3	20.4	60	XHHA18AA001	1.8	370	250	50	65
50	8.1	2.5	14.2	32.9	23/1.35	18.5	22.6	76	XHHA19AA001	2.5	410	270	50	65
70	9.6	2.5	15.8	45.8	32/1.35	20.1	24.2	97	XHHA20AA001	3.5	440	290	50	80
95	11.4	2.5	17.5	61.5	43/1.35	21.8	25.9	120	XHHA22AA001	4.8	470	310	50	80
120	12.8	2.5	18.9	68.7	48/1.35	23.2	27.3	140	XHHA23AA001	6.0	490	330	50	80
150	14.2	2.5	20.3	68.7	48/1.35	24.6	28.7	150	XHHA24AA001	7.5	520	340	50	80
185	15.7	2.5	21.8	68.7	48/1.35	26.1	30.4	160	XHHA25AA001	9.3	550	360	63	100
240	18.0	2.6	24.3	68.7	48/1.35	28.6	33.1	185	XHHA26AA001	12	600	400	63	100
300	20.1	2.8	27.0	68.7	48/1.35	31.3	36.0	210	XHHA27AA001	15	650	430	63	100
400	23.0	3.0	30.3	68.7	48/1.35	34.6	39.5	245	XHHA28AA001	20	710	470	65	150

Note: For larger sizes use 6.35/11kV cables

Current Ratings

Nominal conductor area	Continuous current-carrying capacity, A												Fault current carrying capacity for 1 second	
	In air					In ground			In underground ducts					
mm^2	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Cond. kA	Screen kA
35	138	163	127	134	95	138	139	134	121	122	119	107	3.31	3.37
50	167	197	154	164	113	163	164	159	142	143	140	128	4.73	4.88
70	208	244	192	204	142	198	199	194	172	171	170	158	6.62	6.79
95	252	293	233	248	170	234	233	231	202	199	201	188	8.99	9.13
120	288	334	268	286	193	264	260	262	226	221	227	213	11.4	10.2
150	326	375	303	324	223	293	288	292	251	244	253	242	14.2	10.2
185	371	424	347	371	253	328	320	329	281	272	286	273	17.5	10.2
240	435	492	410	438	294	376	362	380	320	306	328	316	22.7	10.2
300	495	553	469	502	345	419	399	426	356	337	368	365	28.4	10.2
400	572	629	546	585	397	471	443	485	400	374	418	416	37.8	10.2

Electrical Characteristics

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C		Inductive reactance at 50Hz and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Charging current per phase	Dielectric loss per phase	Maximum dielectric stress at 20°C	Screen DC resistance at 20°C	Zero sequence resistance at 50Hz	Zero seq. react.
		Trefoil or flat touching	Flat spaced	Trefoil touching	Flat touching	Flat spaced								
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	μF/km	A/km	W/km	kV/mm	Ohm/km	Ohm/km	Ohm/km
35	0.868	1.11	1.11	0.138	0.154	0.199	8700	0.278	0.332	5.04	1.92	0.799	1.67	0.0709
50	0.641	0.821	0.821	0.135	0.150	0.196	7800	0.309	0.369	5.61	1.87	0.548	1.19	0.0676
70	0.443	0.568	0.568	0.125	0.140	0.185	6800	0.353	0.422	6.41	1.82	0.395	0.838	0.0591
95	0.320	0.410	0.410	0.118	0.134	0.179	6000	0.400	0.478	7.26	1.77	0.294	0.614	0.0543
120	0.253	0.325	0.325	0.114	0.129	0.175	5500	0.439	0.524	7.96	1.74	0.263	0.516	0.0512
150	0.206	0.265	0.264	0.111	0.126	0.171	5100	0.477	0.569	8.66	1.72	0.263	0.469	0.0485
185	0.164	0.211	0.211	0.108	0.123	0.169	4700	0.518	0.618	9.40	1.70	0.263	0.428	0.0462
240	0.125	0.161	0.161	0.104	0.119	0.165	4300	0.561	0.670	10.2	1.62	0.264	0.389	0.0436
300	0.100	0.130	0.129	0.102	0.118	0.163	4100	0.582	0.695	10.6	1.50	0.263	0.363	0.0426
400	0.0778	0.102	0.101	0.0989	0.114	0.160	3900	0.613	0.731	11.1	1.39	0.263	0.342	0.0399

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