XHAKXS Cable

Eland Product Group: P9X

APPLICATION

Medium voltage power cables for distribution networks and generation units, suitable for external installation including in direct in ground and in buried cable ducts. UV Resistant.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
6/10 (12)kV
8.7/15 (17.5)kV
12/20 (24)kV
18/30 (36)kV

Test Voltage
10kV: 21kV AC 50Hz (5 mins)
20kV: 42kV AC 50Hz (5 mins)
30kV: 63kV AC 50Hz (5 mins)

Temperature Rating
-20°C to +60°C
Permissible Conductor Operating Temperature: +90°C
Permissible Short Circuit Temperature up to 5 sec: 250°C

Minimum Bending Radius
15 x overall diameter

CONSTRUCTION

Conductor
Class 2 Stranded Aluminium

Conductor Screen
Semi-conductive material

Insulation
XLPE (Cross-Linked Polyethylene)

Insulation Screen
Semi-conductive material (bonded)

Screen
Copper wires and copper tape

Outer Sheath
MDPE (Medium Density Polyethylene)

Sheath Colour
● Red ● Black

STANDARDS

IEC 60502-2, Generally to PN HD 620 10R

UV Resistant: ISO 4892-3
Abrasion and Tear Resistant: EN 60229-4.1
Impact rated to: AG2 EN 60364-5.51

THE CABLE LAB®

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.

SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability

REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.

DIMENSIONS 6/10 (12)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²		NOMINAL CONDUCTOR DIAMETER	NUMBER WIRES CONDUCTOR	NOM. THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATION
		Conductor	Screen			INNER	OUTER			
				mm	mm	mm	mm	mm	mm	mm
P9XAY10KV1050	1	50	16	8.20	7 x 2.90	0.50	0.40	3.40	2.96	16.4
P9XAY10KV1070	1	70	16	9.70	19 x 2.18	0.50	0.40	3.40	2.96	17.9
P9XAY10KV1095	1	95	16	11.4	19 x 2.55	0.50	0.40	3.40	2.96	19.6
P9XAY10KV1120	1	120	16	12.65	19 x 2.90	0.50	0.40	3.40	2.96	20.9
P9XAY10KV1150	1	150	25	14.4	19 x 3.16	0.50	0.40	3.40	2.96	22.6
P9XAY10KV1185	1	185	25	15.75	37 x 2.55	0.50	0.40	3.40	2.96	24.4
P9XAY10KV1240	1	240	25	18.2	37 x 2.90	0.50	0.40	3.40	2.96	26.9
P9XAY10KV1300	1	300	25	20.5	61 x 2.55	0.50	0.40	3.40	2.96	29.2
P9XAY10KV1400	1	400	35	23.0	61 x 2.90	0.50	0.40	3.40	2.96	31.7
P9XAY10KV1500	1	500	35	26.0	61 x 3.20	0.50	0.40	3.40	2.96	34.7
P9XAY10KV1630	1	630	35	30.2	61 x 3.65	0.50	0.40	3.40	2.96	38.9

NOMINAL CROSS SECTIONAL AREA	NUMBER WIRES SCREEN	DIAMETER TAPE SCREEN	NOMINAL SHEATH THICKNESS	MINIMUM SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT	MAXIMUM SIDEWALL PRESSURE	MAXIMUM PULLING TENSION
mm²	mm	mm	mm	mm	mm	kg/km	N/cm²	N
50	44 x 0.66	1x0.1x10	1.80	1.24	23	550	331	1500
70	44 x 0.66	1x0.1x10	1.80	1.24	24	650	415	2100
95	44 x 0.66	1x0.1x10	1.80	1.24	26	750	522	2850
120	44 x 0.66	1x0.1x10	1.80	1.24	27	850	621	4500
150	71 x 0.66	1x0.1x10	1.90	1.32	29	1100	708	7500
185	71 x 0.66	1x0.1x10	1.90	1.32	31	1200	809	5550
240	71 x 0.66	1x0.1x10	2.00	1.40	33	1400	938	7200
300	71 x 0.66	1x0.1x10	2.10	1.48	36	1600	1081	9000
400	60 x 0.85	1x0.1x15	2.20	1.56	39	2000	1311	12000
500	60 x 0.85	1x0.1x15	2.30	1.64	42	2500	1471	15000
630	60 x 0.85	1x0.1x15	2.40	1.72	46	3000	1654	18900

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ELECTRICAL CHARACTERISTICS 6/10 (12)kV

NOMINAL CROSS SECTIONAL AREA	CONDUCTOR DC RESISTANCE AT 20°C	CONDUCTOR DC RESISTANCE AT 75°C	CONDUCTOR AC RESISTANCE BY MAX TEMP	CURRENT CARRYING CAPACITY (A)		REACTANCE	CHARGING ADMITTANCE	CAPACITANCE	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC	CONDUCTOR LOSSES IN THE GROUND
mm²	ohms/km	ohms/km	ohms/km	In Ground 20°C	In Air 30°C	ohms/km	A/km	uF/km		kA	kW/km
50	0.641	1.32	0.825	194	215	0.18	0.35	0.22	4.70	3.2	31.0
70	0.443	0.917	0.570	236	269	0.17	0.33	0.24	6.58	3.2	31.7
95	0.32	0.662	0.412	281	327	0.17	0.32	0.28	8.93	3.2	32.5
120	0.258	0.524	0.328	318	377	0.16	0.31	0.30	11.28	3.2	33.2
150	0.203	0.426	0.268	350	424	0.16	0.30	0.33	14.10	5.0	32.8
185	0.165	0.339	0.213	393	485	0.16	0.29	0.36	17.39	5.0	32.9
240	0.125	0.258	0.160	453	573	0.15	0.28	0.40	22.56	5.0	33.4
300	0.100	0.207	0.132	507	652	0.15	0.28	0.45	28.20	5.0	33.9
400	0.0778	0.161	0.103	559	741	0.15	0.27	0.49	37.60	7.1	32.2
500	0.0605	0.125	0.0810	622	838	0.15	0.26	0.54	47.00	7.1	31.3
630	0.0469	0.0972	0.0640	701	882	0.14	0.25	0.62	59.22	7.1	47.3

Derating factor (ground): 1 (Soil thermal resistivity: 1km/W, Depth 0.8m, Flat formation - touching)
Derating factor (air): 1 (Flat formation - touching)

DIMENSIONS 8.7/15 (17.5)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER OF CONDUCTOR mm	INSULATION mm		METALLIC SCREEN		NOMINAL OUTER DIAMETER OF CABLE mm	NOMINAL WEIGHT kg/km	MAXIMUM PULLING FORCE kN	MINIMUM BENDING RADIUS m
				Nominal thickness	Nominal diameter over	Nominal cross section mm²	Nominal diameter over mm				
P9XAY15KV1050	1	50	8.25	4.5	18.5	16	22.4	27.1	780	1.5	0.41
P9XAY15KV1070	1	70	9.5	4.5	19.7	25	23.6	28.4	950	2.1	0.43
P9XAY15KV1095	1	95	11.3	4.5	21.5	35	25.4	30.2	1160	2.85	0.45
P9XAY15KV1120	1	120	12.5	4.5	22.7	50	26.6	31.4	1400	3.6	0.47
P9XAY15KV1150	1	150	14.2	4.5	24.4	50	28.3	33.1	1520	4.5	0.50
P9XAY15KV1185	1	185	15.8	4.5	26.0	50	29.9	34.7	1660	5.55	0.52
P9XAY15KV1240	1	240	17.9	4.5	28.1	50	32.0	36.8	1870	7.2	0.55
P9XAY15KV1300	1	300	20.0	4.5	30.2	50	34.1	38.9	2080	9	0.58
P9XAY15KV1400	1	400	22.9	4.5	33.1	50	37.0	41.8	2390	12	0.63
P9XAY15KV1500	1	500	25.7	4.5	36.4	50	40.5	45.3	2810	15	0.68
P9XAY15KV1630	1	630	29.3	4.5	40.3	50	44.4	49.3	3310	18.9	0.74
P9XAY15KV1800	1	800	33.0	4.5	44.4	50	48.5	53.6	3920	24	0.80
P9XAY15KV11000	1	1000	38.0	4.5	49.4	50	53.5	59.0	4680	30	0.89

ELECTRICAL CHARACTERISTICS 8.7/15 (17.5)kV

NOMINAL CROSS SECTIONAL AREA CONDUCTOR/ METALLIC SCREEN mm²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/km	MAXIMUM CONDUCTOR AC RESISTANCE AT 90°C Ω/km	MAXIMUM METALLIC SCREEN DC RESISTANCE AT 20°C Ω/km	MAXIMUM METALLIC SCREEN AC RESISTANCE AT 80°C Ω/km	ELECTRICAL FIELD STRESS kV/mm		RESISTANCE Ω/km	CAPACITANCE µF/km	CAPACITANCE REACTANCE Ω/km	CHARGING CURRENT A/km	REACTANCE Ω/km
					Conductor screen	Insulation					
50/16	0.641	0.822	1.12	1.38	2.72	1.37	2.20	0.19	17.2	0.51	0.075
70/25	0.443	0.568	0.72	0.89	2.63	1.40	1.45	0.20	15.7	0.56	0.070
95/35	0.320	0.411	0.51	0.63	2.53	1.45	1.04	0.23	13.9	0.63	0.064
120/50	0.253	0.325	0.36	0.44	2.48	1.47	0.77	0.25	12.9	0.67	0.061
150/50	0.206	0.265	0.36	0.44	2.42	1.51	0.71	0.27	11.8	0.74	0.057
185/50	0.164	0.211	0.36	0.44	2.37	1.53	0.65	0.29	10.9	0.80	0.054
240/50	0.125	0.161	0.36	0.44	2.32	1.56	0.60	0.32	9.9	0.88	0.050
300/50	0.100	0.130	0.36	0.44	2.28	1.59	0.57	0.35	9.1	0.96	0.047
400/50	0.0778	0.102	0.36	0.44	2.24	1.61	0.54	0.39	8.1	1.07	0.044
500/50	0.0605	0.0801	0.36	0.44	2.18	1.62	0.52	0.43	7.3	1.18	0.043
630/50	0.0469	0.0634	0.36	0.44	2.14	1.65	0.51	0.49	6.5	1.33	0.040
800/50	0.0367	0.0513	0.36	0.44	2.11	1.67	0.49	0.54	5.9	1.49	0.039
1000/50	0.0291	0.0427	0.36	0.44	2.08	1.69	0.49	0.61	5.2	1.67	0.036

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NOMINAL CROSS SECTIONAL AREA CONDUCTOR/ METALLIC SCREEN mm²	INDUCTANCE L mH/km			INDUCTANCE REACTANCE XL Ω/km			IMPEDANCE Ω/km		
	o o²	ooo³	ooo⁴	o o²	ooo³	ooo⁴	o o²	ooo³	ooo⁴
50/16	0.43	0.73	0.61	0.134	0.229	0.192	0.833	0.853	0.844
70/25	0.41	0.70	0.59	0.128	0.221	0.186	0.582	0.610	0.598
95/35	0.39	0.67	0.57	0.121	0.211	0.179	0.428	0.462	0.448
120/50	0.37	0.65	0.56	0.117	0.205	0.175	0.345	0.384	0.369
150/50	0.36	0.63	0.54	0.112	0.198	0.171	0.288	0.331	0.315
185/50	0.35	0.61	0.53	0.109	0.193	0.167	0.237	0.286	0.269
240/50	0.33	0.59	0.52	0.105	0.186	0.163	0.192	0.246	0.229
300/50	0.32	0.57	0.51	0.101	0.180	0.159	0.164	0.222	0.205
400/50	0.31	0.55	0.49	0.097	0.173	0.155	0.141	0.201	0.185
500/50	0.30	0.54	0.49	0.095	0.168	0.153	0.124	0.186	0.173
630/50	0.29	0.52	0.48	0.092	0.162	0.150	0.112	0.174	0.163
800/50	0.29	0.50	0.47	0.090	0.157	0.148	0.103	0.165	0.156
1000/50	0.28	0.48	0.46	0.087	0.151	0.145	0.097	0.157	0.151

2 - Cables in trefoil formation, the distance between cables De
3 - Cables in flat formation (in the ground), the distance between cables De + 70 mm
4 - Cables in flat formation (in the air), the distance between cables 2 × De

CURRENT RATING FOR SINGLE-CORE CABLES – AMPERES

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM SHORT CIRCUIT CAPACITY CONDUCTOR kA/sec	MAXIMUM SHORT CIRCUIT CAPACITY METALLIC SCREEN kA/sec	FLAT FORMATION		TREFOIL FORMATION		FLAT FORMATION		TREFOIL FORMATION	
			CONFIGURATIONS							
			SPP; CB	BOTH-ENDS	SPP; CB	BOTH-ENDS	SPP; CB	BOTH-ENDS	SPP; CB	BOTH-ENDS
			CABLES IN EARTH				CABLES IN AIR			
50/16	4.7	3.7	225	224	212	212	231	230	196	196
70/25	6.6	5.3	276	272	259	258	286	283	242	242
95/35	9.0	7.1	333	324	312	310	350	343	295	294
120/50	11.3	9.8	379	364	356	353	403	388	340	337
150/50	14.2	9.8	428	407	401	397	461	440	387	384
185/50	17.5	9.8	487	456	455	450	530	501	445	440
240/50	22.7	9.8	567	520	530	522	627	583	526	518
300/50	28.4	9.8	643	578	600	589	722	660	604	593
400/50	37.8	9.8	742	650	692	676	849	758	708	692
500/50	47.3	9.8	851	725	793	770	991	862	825	802
630/50	59.5	9.8	979	808	908	876	1161	981	963	931
800/50	75.6	9.8	1116	889	1028	983	1347	1101	1110	1065
1000/50	94.5	9.8	1262	971	1152	1093	1558	1225	1271	1210

SPB – Single Point Bonding; CB – Cross-bonding Both-ends; BE – Both-ends bonding

Laying conditions at trefoil formation are as below:

-Soil thermal resistivity: 1/2.5 k m/W

-Burial depth: 0.7m

-Ground temperature: 20°C | Ambient temperature: 30°C

DIMENSIONS 12/20 (24)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²		NOMINAL CONDUCTOR DIAMETER	NUMBER WIRES CONDUCTOR	NOM. THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATION
		Conductor	Screen			INNER	OUTER			
				mm	mm	mm	mm	mm	mm	mm
P9XAY20KV1050	1	50	16	8.20	7 x 2.90	0.50	0.40	5.50	4.85	20.4
P9XAY20KV1070	1	70	16	9.70	19 x 2.18	0.50	0.40	5.50	4.85	21.9
P9XAY20KV1095	1	95	16	11.4	19 x 2.55	0.50	0.40	5.50	4.85	23.6
P9XAY20KV1120	1	120	16	12.65	19 x 2.90	0.50	0.40	5.50	4.85	24.9
P9XAY20KV1150	1	150	25	14.4	19 x 3.16	0.50	0.40	5.50	4.85	26.6
P9XAY20KV1185	1	185	25	15.75	37 x 2.55	0.50	0.40	5.50	4.85	28.4
P9XAY20KV1240	1	240	25	18.2	37 x 2.90	0.50	0.40	5.50	4.85	30.9
P9XAY20KV1300	1	300	25	20.5	61 x 2.55	0.50	0.40	5.50	4.85	33.2
P9XAY20KV1400	1	400	35	23.0	61 x 2.90	0.50	0.40	5.50	4.85	35.7
P9XAY20KV1500	1	500	35	26.0	61 x 3.20	0.50	0.40	5.50	4.85	38.7
P9XAY20KV1630	1	630	35	30.2	61 x 3.65	0.50	0.40	5.50	4.85	42.9

NOMINAL CROSS SECTIONAL AREA	NUMBER WIRES SCREEN	DIAMETER TAPE SCREEN	NOMINAL SHEATH THICKNESS	MINIMUM SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT	MAXIMUM SIDEWALL PRESSURE	MAXIMUM PULLING TENSION
mm²	mm	mm	mm	mm	mm	kg/km	N/cm²	N
50	44 x 0.66	1x0.1x10	1.80	1.24	27	700	292	1500
70	44 x 0.66	1x0.1x10	1.90	1.32	28	800	371	2100
95	44 x 0.66	1x0.1x10	1.90	1.32	30	900	479	2850
120	44 x 0.66	1x0.1x10	2.00	1.40	31	1000	550	3600
150	71 x 0.66	1x0.1x10	2.00	1.40	33	1300	633	4500
185	71 x 0.66	1x0.1x10	2.10	1.48	35	1400	729	5550
240	71 x 0.66	1x0.1x10	2.10	1.48	38	1600	870	7200
300	71 x 0.66	1x0.1x10	2.20	1.56	40	1900	992	9000
400	60 x 0.85	1x0.1x15	2.30	1.64	43	2250	1212	12000
500	60 x 0.85	1x0.1x15	2.40	1.72	46	2750	1389	15000
630	60 x 0.85	1x0.1x15	2.50	1.80	51	3250	1571	18900

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ELECTRICAL CHARACTERISTICS 12/20 (24)kV

NOMINAL CROSS SECTIONAL AREA	CONDUCTOR DC RESISTANCE AT 20°C	CONDUCTOR DC RESISTANCE AT 75°C	CONDUCTOR AC RESISTANCE BY MAX TEMP	CURRENT CARRYING CAPACITY (A)		REACTANCE	CHARGING ADMITTANCE	CAPACITANCE	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC	CONDUCTOR LOSSES IN THE GROUND
mm²	ohms/km	ohms/km	ohms/km	In Ground 20°C	In Air 30°C	ohms/km	A/km	uF/km		kA	kW/km
50	0.641	1.32	0.825	195	217	0.19	0.39	0.15	4.70	3.2	31.4
70	0.443	0.917	0.570	237	270	0.18	0.37	0.17	6.58	3.2	32.0
95	0.32	0.662	0.412	282	328	0.18	0.35	0.19	8.93	3.2	32.8
120	0.258	0.524	0.328	320	378	0.17	0.34	0.20	11.28	3.2	33.6
150	0.203	0.426	0.268	353	425	0.17	0.33	0.22	14.10	5.0	33.4
185	0.164	0.339	0.213	396	485	0.17	0.32	0.24	17.39	5.0	33.4
240	0.125	0.258	0.160	457	573	0.16	0.31	0.27	22.56	5.0	34.0
300	0.100	0.207	0.132	511	652	0.16	0.30	0.29	28.20	5.0	34.5
400	0.0778	0.161	0.103	566	740	0.16	0.29	0.32	37.60	7.1	33.0
500	0.0605	0.125	0.0810	630	838	0.15	0.28	0.35	47.00	7.1	32.1
630	0.0469	0.0972	0.0640	860	1080	0.15	0.27	0.40	59.22	7.1	47.3

Derating factor (ground): 1 (Soil thermal resistivity: 1km/W, Depth 0.8m, Flat formation - touching)
Derating factor (air): 1 (Flat formation - touching)

DIMENSIONS 18/30 (36)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²		NOMINAL CONDUCTOR DIAMETER	NUMBER WIRES CONDUCTOR	NOM. THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATION
		Conductor	Screen			INNER	OUTER			
				mm	mm	mm	mm	mm	mm	mm
P9XAY30KV1050	1	50	16	8.20	7 x 2.90	0.50	0.40	8.00	7.10	25.2
P9XAY30KV1070	1	70	16	9.70	19 x 2.18	0.50	0.40	8.00	7.10	26.7
P9XAY30KV1095	1	95	16	11.4	19 x 2.55	0.50	0.40	8.00	7.10	28.4
P9XAY30KV1120	1	120	16	12.65	19 x 2.90	0.50	0.40	8.00	7.10	29.7
P9XAY30KV1150	1	150	25	14.4	19 x 3.16	0.50	0.40	8.00	7.10	31.4
P9XAY30KV1185	1	185	25	15.75	37 x 2.55	0.50	0.40	8.00	7.10	33.2
P9XAY30KV1240	1	240	25	18.2	37 x 2.90	0.50	0.40	8.00	7.10	35.7
P9XAY30KV1300	1	300	25	20.5	61 x 2.55	0.50	0.40	8.00	7.10	38.0
P9XAY30KV1400	1	400	35	23.0	61 x 2.90	0.50	0.40	8.00	7.10	40.5
P9XAY30KV1500	1	500	35	26.0	61 x 3.20	0.50	0.40	8.00	7.10	43.5
P9XAY30KV1630	1	630	35	30.2	61 x 3.65	0.50	0.40	8.00	7.10	47.7

NOMINAL CROSS SECTIONAL AREA	NUMBER WIRES SCREEN	DIAMETER TAPE SCREEN	NOMINAL SHEATH THICKNESS	MINIMUM SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT	MAXIMUM SIDEWALL PRESSURE	MAXIMUM PULLING TENSION
mm²	mm	mm	mm	mm	mm	kg/km	N/cm²	N
50	44 x 0.66	1x0.1x10	2.00	1.40	32	900	255	1500
70	44 x 0.66	1x0.1x10	2.00	1.40	33	1100	328	2100
95	44 x 0.66	1x0.1x10	2.10	1.48	35	1200	409	2850
120	44 x 0.66	1x0.1x10	2.10	1.48	36	1300	493	3600
150	71 x 0.66	1x0.1x10	2.20	1.56	38	1500	573	4500
185	71 x 0.66	1x0.1x10	2.20	1.56	40	1700	664	5550
240	71 x 0.66	1x0.1x10	2.30	1.64	43	1900	784	7200
300	71 x 0.66	1x0.1x10	2.40	1.72	45	2250	916	9000
400	60 x 0.85	1x0.1x15	2.50	1.80	48	2750	1127	12000
500	60 x 0.85	1x0.1x15	2.60	1.88	51	3000	1299	15000
630	60 x 0.85	1x0.1x15	2.70	1.96	56	3500	1462	18900

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ELECTRICAL CHARACTERISTICS 18/30 (36)kV

NOMINAL CROSS SECTIONAL AREA	CONDUCTOR DC RESISTANCE AT 20°C	CONDUCTOR DC RESISTANCE AT 75°C	CONDUCTOR AC RESISTANCE BY MAX TEMP	CURRENT CARRYING CAPACITY (A)		REACTANCE	CHARGING ADMITTANCE	CAPACITANCE	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC	CONDUCTOR LOSSES IN THE GROUND
mm²	ohms/km	ohms/km	ohms/km	In Ground 20°C	In Air 30°C	ohms/km	A/km	uF/km		kA	kW/km
50	0.641	1.32	0.825	196	217	0.20	0.43	0.12	4.70	3.2	31.7
70	0.443	0.917	0.570	238	270	0.19	0.41	0.13	6.58	3.2	32.3
95	0.32	0.662	0.412	284	328	0.19	0.39	0.14	8.93	3.2	33.2
120	0.258	0.524	0.328	322	378	0.18	0.38	0.15	11.28	3.2	34.0
150	0.203	0.426	0.268	355	425	0.18	0.36	0.17	14.10	5.0	33.8
185	0.164	0.339	0.213	400	485	0.18	0.35	0.18	17.39	5.0	34.1
240	0.125	0.258	0.160	461	572	0.17	0.33	0.20	22.56	5.0	34.6
300	0.100	0.207	0.132	516	649	0.17	0.32	0.22	28.20	5.0	35.1
400	0.0778	0.161	0.103	572	737	0.16	0.32	0.24	37.60	7.1	33.7
500	0.0605	0.125	0.0810	638	835	0.16	0.30	0.26	47.00	7.1	33.0
630	0.0469	0.0972	0.0640	701	882	0.15	0.29	0.29	59.22	7.1	47.3

Derating factor (ground): 1 (Soil thermal resistivity: 1km/W, Depth 0.8m, Flat formation - touching)
Derating factor (air): 1 (Flat formation - touching)