ARG7H1(O)R Cable

Eland Product Group: B4D

APPLICATION

Medium Voltage power cables suitable for energy transmission between transformer rooms and big power users. For laying on air, into tube or open pass. Suitable for buried installations, and installations complying with art. 4.3.11 of CEI 11-17 standard.

CHARACTERISTICS

Voltage
3.6/6 (7.2)kV,
6/10 (12)kV,
12/20 (24)kV,
18/30 (36)kV

Temperature Rating
-15°C to 90°C
Maximum temperature during short circuit: 250°C
Minimum installation temperature: 0°C

Minimum Bending Radius
12 x Outer diameter

Maximum Tensile Stress
30 N/mm²

CONSTRUCTION

Conductor
Class 2, compact stranded aluminium

Conductor Screen
Extruded compound (only cables ≥ 6/10 kV)

Insulation
HEPR (Hard Grade Ethylene Propylene Rubber) G7 quality, Pb free

Insulation Screen
Extruded compound (only cables ≥ 6/10 kV)

Metallic Screen
Plain copper tapes wrapped

Filler
Extruded, penetrating between the cores

Outer Sheath
PVC (Polyvinyl Chloride) compound, Rz quality

Outer Sheath Colour
Red

STANDARDS

CEI 20-13, IEC 60502, CEI 20-16, IEC 60885-3,
EN 60332-1-2, EN 60754-1

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ISO/IEC 17025 Accredited Testing Laboratory

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SCIENCE BASED TARGETS BUSINESS AMBITION FOR 1.5°C

REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.

bsi. RoHS Trusted KITEMARK™ KM 634267

RoHS

DIMENSIONS 3.6/6 KV

ELAND PART NUMBER	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL INSULATION THICKNESS mm	NOMINAL OUTER DIAMETER mm	NOMINAL WEIGHT kg/km
B4D06KV03025	3	25	6.10	3.0	31.80	1425
B4D06KV03035	3	35	7.10	3.0	34.06	1635
B4D06KV03050	3	50	8.20	3.0	36.75	1925
B4D06KV03070	3	70	9.90	3.0	40.50	2365
B4D06KV03095	3	95	11.40	3.0	44.45	2885
B4D06KV03120	3	120	13.10	3.0	48.00	3405
B4D06KV03150	3	150	14.40	3.0	51.00	3880
B4D06KV03185	3	185	16.20	3.0	55.15	4535
B4D06KV03240	3	240	18.40	3.0	61.00	5560
B4D06KV03300	3	300	20.65	3.0	65.95	6525
B4D06KV03400	3	400	23.60	3.0	73.25	8505

ELECTRICAL CHARACTERISTICS 3.6/6 KV

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	CONDUCTOR RESISTANCE AT 90°C AND 50Hz Ω/Km	PHASE REACTANCE Ω/Km	CAPACITANCE AT 50Hz µF/km	CURRENT RATING A	
					In Air	Buried
25	1.20	1.270	0.15	0.14	125	125
35	0.868	1.113	0.14	0.15	150	145
50	0.641	0.822	0.13	0.17	164	163
70	0.443	0.568	0.13	0.19	205	204
95	0.320	0.411	0.12	0.21	250	245
120	0.253	0.325	0.12	0.23	288	280
150	0.206	0.265	0.11	0.25	326	312
185	0.164	0.211	0.11	0.27	372	354
240	0.125	0.161	0.10	0.30	438	408
300	0.100	0.130	0.096	0.34	502	460
400	0.0778	0.102	0.093	0.38	572	520

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DIMENSIONS 6/10 KV

ELAND PART NUMBER	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL INSULATION THICKNESS mm	NOMINAL OUTER DIAMETER mm	NOMINAL WEIGHT kg/km
B4D10KV03025	3	25	6.10	3.4	38.10	1985
B4D10KV03035	3	35	7.0	3.4	40.50	2250
B4D10KV03050	3	50	8.1	3.4	42.90	2545
B4D10KV03070	3	70	9.7	3.4	47.10	3105
B4D10KV03095	3	95	11.4	3.4	50.80	3670
B4D10KV03120	3	120	12.9	3.4	54.60	4275
B4D10KV03150	3	150	14.3	3.4	57.60	4785
B4D10KV03185	3	185	16.0	3.4	61.90	5537
B4D10KV03240	3	240	18.3	3.4	68.20	6765
B4D10KV03300	3	300	21.0	3.4	73.20	7825
B4D10KV03400	3	400	23.6	3.4	81.30	10100

ELECTRICAL CHARACTERISTICS 6/10 KV

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	CONDUCTOR RESISTANCE AT 90°C AND 50Hz Ω/Km	PHASE REACTANCE Ω/Km	CAPACITANCE AT 50Hz µF/km	CURRENT RATING A	
					In Air	Buried
25	1.20	1.222	0.12	0.21	113	116
35	0.868	1.113	0.11	0.23	137	139
50	0.641	0.822	0.11	0.26	162	164
70	0.443	0.568	0.10	0.29	203	200
95	0.320	0.411	0.097	0.32	246	239
120	0.253	0.325	0.094	0.36	285	273
150	0.206	0.265	0.091	0.38	317	304
185	0.164	0.211	0.088	0.42	366	343
240	0.125	0.161	0.085	0.47	429	398
300	0.100	0.130	0.084	0.52	491	452
400	0.0778	0.102	0.082	0.57	562	511

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DIMENSIONS 12/20 KV

ELAND PART NUMBERS	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL INSULATION THICKNESS mm	NOMINAL OUTER DIAMETER mm	NOMINAL WEIGHT kg/km
B4D20KV03025	3	25	6.10	5.5	48.10	2980
B4D20KV03035	3	35	7.0	5.5	50.40	3290
B4D20KV03050	3	50	8.1	5.5	52.80	3645
B4D20KV03070	3	70	9.7	5.5	56.45	4210
B4D20KV03095	3	95	11.4	5.5	60.70	4905
B4D20KV03120	3	120	12.9	5.5	64.95	5675
B4D20KV03150	3	150	14.3	5.5	68.05	6180
B4D20KV03185	3	185	16.0	5.5	72.20	7100
B4D20KV03240	3	240	18.3	5.5	78.90	8490
B4D20KV03300	3	300	21.0	5.5	83.95	9685
B4D20KV03400	3	400	23.6	5.5	91.40	11975

ELECTRICAL CHARACTERISTICS 12/20 KV

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	CONDUCTOR RESISTANCE AT 90°C AND 50Hz Ω/Km	PHASE REACTANCE Ω/Km	CAPACITANCE AT 50Hz µF/km	CURRENT RATING A	
					In Air	Buried
25	1.20	1.222	0.21	0.17	125	115
35	0.868	1.113	0.20	0.17	150	145
50	0.641	0.822	0.19	0.18	175	175
70	0.443	0.568	0.19	0.21	220	210
95	0.320	0.411	0.18	0.23	265	255
120	0.253	0.325	0.18	0.25	305	290
150	0.206	0.265	0.17	0.27	345	320
185	0.164	0.211	0.17	0.29	406	360
240	0.125	0.161	0.16	0.32	470	420
300	0.100	0.130	0.16	0.35	590	500
400	0.0778	0.102	0.16	0.39	640	543

DIMENSIONS 18/30 KV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL INSULATION THICKNESS mm	NOMINAL OUTER DIAMETER mm	NOMINAL WEIGHT kg/km
3	185	16.0	8.0	85.50	9680

ELECTRICAL CHARACTERISTICS 18/30 KV

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	CONDUCTOR RESISTANCE AT 90°C AND 50Hz Ω/Km	PHASE REACTANCE Ω/Km	CAPACITANCE AT 50Hz µF/km	CURRENT RATING A	
					In Air	Buried
185	0.164	0.211	0.12	0.22	406	361

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