Coil End Lead Type 4 BS 6195 Cable

Eland Product Group: A6K

APPLICATION

Coil end leads are used mainly as a flexible connection to coil windings of motors, generators, transformers, circuit breakers and actuators. Also suitable in certain applications instead of tri-rated and bi-rated cables.

CHARACTERISTICS

Voltage Rating Uo/U
Type 4A: 300/500V
Type 4C: 0.6/1kV
Type 4D: 1.9/3.3kV
Type 4E: 3.8/6.6kV
Type 4F: 6.35/11kV

Temperature Rating
Fixed: -40°C to +90°C
Flexed: -30°C to +90°C

Minimum Bending Radius
Fixed: 4 x overall diameter
Flexed: 6 x overall diameter

CONSTRUCTION

Conductor
Class 5 flexible tinned copper conductor

Separator
PET (Polyester Tape)

Insulation
4A, 4C: EPR-HOFR (Ethylene Propylene Rubber - Heat and Oil Resistant and Flame Retardant)
4D, 4E, 4F: EPR-HOFR (Ethylene Propylene Rubber - Heat and Oil Resistant and Flame Retardant)

Outer Sheath
CPE (Chlorinated Polyethylene) rubber compound

Sheath Colour
● Black

STANDARDS

BS 6195, EN 60228

Flame Retardant according to IEC/EN 60332-1-2

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.

UKAS ISO/IEC 17025 Accredited Testing Laboratory 8578
bsi. ISO 9001 Quality Management FS 672069 | ISO 14001 Environmental Management EMS 672067 | ISO 45001 Occupational Health and Safety Management OHS 672066

REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and 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 | CE

DIMENSIONS

ELAND PART NO.	CABLE TYPE	NO. OF CORES	VOLTAGE RATING KV	NOMINAL CROSS SECTIONAL AREA mm^2	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A6K0015A	4A	1	0.3/0.5	1.5	0.8	4	29
A6K0025A	4A	1	0.3/0.5	2.5	0.9	4.6	42
A6K0040A	4A	1	0.3/0.5	4	1	5.4	61
A6K006A	4A	1	0.3/0.5	6	1	6.5	88
A6K010A	4A	1	0.3/0.5	10	1.2	7.9	141
A6K0015	4C	1	0.6/1	1.5	1.4	4.3	34
A6K0025	4C	1	0.6/1	2.5	1.4	4.8	45
A6K0040	4C	1	0.6/1	4	1.4	5.4	70
A6K006	4C	1	0.6/1	6	1.5	6.2	97
A6K010	4C	1	0.6/1	10	1.5	8.5	130
A6K016	4C	1	0.6/1	16	1.5	9.6	190
A6K025	4C	1	0.6/1	25	1.6	11.4	290
A6K035	4C	1	0.6/1	35	1.6	12.8	380
A6K050	4C	1	0.6/1	50	1.7	14.8	510
A6K070	4C	1	0.6/1	70	1.8	17.2	750
A6K095	4C	1	0.6/1	95	2	19.7	935
A6K120	4C	1	0.6/1	120	2.2	21.9	1160
A6K150	4C	1	0.6/1	150	2.3	24.1	1450
A6K185	4C	1	0.6/1	185	2.4	26.3	1770
A6K240	4C	1	0.6/1	240	2.4	28.3	2260
A6K300	4C	1	0.6/1	300	2.6	33	2760
A6K400	4C	1	0.6/1	400	2.8	37.4	3880
A6K500	4C	1	0.6/1	500	3.2	38	4650
A6K630	4C	1	0.6/1	630	3.3	43	6220
A6K0025D	4D	1	1.9/3.3	2.5	2.8	8.5	100
A6K0040D	4D	1	1.9/3.3	4	2.8	9.1	115
A6K006D	4D	1	1.9/3.3	6	2.8	10.3	141
A6K010D	4D	1	1.9/3.3	10	2.8	11.3	216
A6K016D	4D	1	1.9/3.3	16	2.8	12.4	288
A6K025D	4D	1	1.9/3.3	25	2.8	13.8	392
A6K035D	4D	1	1.9/3.3	35	2.8	15.2	509
A6K050D	4D	1	1.9/3.3	50	2.8	17.1	682
A6K070D	4D	1	1.9/3.3	70	2.8	19.2	894
A6K095D	4D	1	1.9/3.3	95	3	22	1168
A6K120D	4D	1	1.9/3.3	120	3	23.5	1433
A6K150D	4D	1	1.9/3.3	150	3	25.5	1734
A6K185D	4D	1	1.9/3.3	185	3	27.5	2073
A6K240D	4D	1	1.9/3.3	240	3	30.6	2657
A6K300D	4D	1	1.9/3.3	300	3	33.8	3279
A6K400D	4D	1	1.9/3.3	400	3	37.8	4229
A6K016E	4E	1	3.8/6.6	16	5	17.2	408
A6K025E	4E	1	3.8/6.6	25	5	18.6	527
A6K035E	4E	1	3.8/6.6	35	5	20	656
A6K050E	4E	1	3.8/6.6	50	5	22.1	832

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ELAND PART NO.	CABLE TYPE	NO. OF CORES	VOLTAGE RATING KV	NOMINAL CROSS SECTIONAL AREA mm^2	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A6K070E	4E	1	3.8/6.6	70	5	24.2	1053
A6K095E	4E	1	3.8/6.6	95	5	26.3	1304
A6K120E	4E	1	3.8/6.6	120	5	27.8	1634
A6K150E	4E	1	3.8/6.6	150	5	29.8	1894
A6K185E	4E	1	3.8/6.6	185	5	32.1	2242
A6K240E	4E	1	3.8/6.6	240	5	35.1	2842
A6K025F	4F	1	6.35/11	25	7.6	24.1	764
A6K035F	4F	1	6.35/11	35	7.6	25.5	911
A6K050F	4F	1	6.35/11	50	7.6	27.3	1114
A6K070F	4F	1	6.35/11	70	7.6	29.4	1344
A6K095F	4F	1	6.35/11	95	7.6	31.5	1610
A6K120F	4F	1	6.35/11	120	7.6	33.3	1919
A6K150F	4F	1	6.35/11	150	7.6	35.3	2248
A6K185F	4F	1	6.35/11	185	7.6	37.3	2616
A6K240F	4F	1	6.35/11	240	7.6	40.3	3252

ELECTRICAL CHARACTERISTICS

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm^2	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
		Plain Wires
1.5	0.26	13.3
2.5	0.26	7.98
4	0.31	4.95
6	0.31	3.3
10	0.41	1.91
16	0.41	1.21
25	0.41	0.78
35	0.41	0.554
50	0.41	0.386
70	0.51	0.272
95	0.51	0.206
120	0.51	0.161
150	0.51	0.129
185	0.51	0.106
240	0.51	0.0801
300	0.51	0.0641
400	0.51	0.0486
500	0.61	0.0384
630	0.61	0.0287

The above table is in accordance with EN 60228

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	REFERENCE METHOD C (clipped direct) A		REFERENCE METHOD F (in free air or on a perforated cable tray etc horizontal or vertical etc) Touching A			REFERENCE METHOD G (in free air) Spaced by one cable diameter A	
						2 cables, single-phase AC or DC or 3 cables three-phase AC flat	
	2 cables, single-phase AC or DC flat and touching	3 or 4 cables, three-phase AC flat and touching or trefoil	2 cables, single-phase AC or DC flat	3 cables, three- phase AC flat	3 cables, three-phase AC trefoil	Horizontal	Vertical
I	19	17.5	-	-	-	-	-
1.5	25	23	-	-	-	-	-
2.5	34	31	-	-	-	-	-
4	46	41	-	-	-	-	-
6	59	54	-	-	-	-	-
10	81	74	-	-	-	-	-
16	109	99	-	-	-	-	-
25	143	130	161	141	135	182	161
35	176	161	200	176	169	226	201
50	228	209	242	216	207	275	246
70	293	268	310	279	268	353	318
95	355	326	377	342	328	430	389
120	413	379	437	400	383	500	454
150	476	436	504	464	444	577	527
185	545	500	575	533	510	661	605
240	644	590	679	634	607	781	719
300	743	681	783	736	703	902	833
400	868	793	940	868	823	1085	1008
500	990	904	1083	998	946	1253	1169
630	1130	1033	1254	1151	1088	1454	1362
800	1288	1179	1358	1275	1214	1581	1485
1000	1443	1323	1520	1436	1349	I 775	1671

Reference table : 4E1A 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52

Ambient temperature: 30°C
Conductor operating temperature: 90°C

NOTES:

1. There it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5).
2. There it is intended to group a cable in this table with other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 512.1.5).
3. For cables having flexible conductors see section 2.4 of appendix for adjustment factors for current-carrying capacity and voltage drop.

DE-RATING FACTORS

AMBIENT TEMP	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C	85°C	90°C	95°C
DE-RATING FACTOR	1.02	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41	-	-	-

Reference table : 4B1 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52

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