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**ELAND[®]
CABLES**

ARE4H5E Cable



APPLICATION

Medium Voltage power cable suitable for laying in underground channels; in underground pipe; in open air; Underground installation with protection is also allowed. Suitable in wind power plants.

CHARACTERISTICS

Voltage

12/20 kV,
18/30 kV

Temperature Rating

Minimum installation temperature: -25°C
Maximum operating temperature: 90°C
Maximum temperature during short circuit: 250°C

CONSTRUCTION

Conductor

Class 2 compacted stranded aluminium

Conductor Screen

Semi-conductive XLPE compound

Insulation

XLPE (Cross-Linked Polyethylene) compound (DIX 8)

Insulation Screen

Semi-conductive XLPE compound

Protective Layer

Semiconductive watertight tape

Metallic Screen

Aluminium tape longitudinally applied

Outer Sheath

MDPE (Medium Density Polyethylene) (DPM 2)

Outer Sheath Colour

● Red

STANDARDS

In accordance with IEC 60502-2, CEI 20-13, generally to HD 620 10 11
Halogen free to IEC 60754

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 12/20KV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL CONDUCTOR DIAMETER mm	MINIMUM CONDUCTOR SCREEN THICKNESS mm	NOMINAL INSULATION THICKNESS mm	MINIMUM INSULATION THICKNESS mm	MINIMUM INSULATION SCREEN THICKNESS mm	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
T9YA20KV01050	1	50	8.2	0.3	4.9	4.31	0.3	19.32	2	27.32	607
T9YA20KV01070	1	70	9.8	0.3	4.9	4.31	0.3	20.92	2	28.92	698
T9YA20KV01095	1	95	11.5	0.3	4.9	4.31	0.3	22.62	2	30.62	805
T9YA20KV01120	1	120	12.65	0.3	4.9	4.31	0.3	23.77	2.1	31.97	916
T9YA20KV01150	1	150	14.4	0.3	4.9	4.31	0.3	25.52	2.1	33.72	1035
T9YA20KV01185	1	185	15.75	0.3	4.9	4.31	0.3	26.87	2.2	35.27	1179
T9YA20KV01240	1	240	18.2	0.3	4.9	4.31	0.3	29.32	2.2	37.72	1384
T9YA20KV01300	1	300	20.5	0.3	4.9	4.31	0.3	31.62	2.3	40.22	1613
T9YA20KV01400	1	400	23	0.3	4.9	4.31	0.3	34.12	2.4	42.92	1972
T9YA20KV01500	1	500	26	0.3	4.9	4.31	0.3	37.12	2.5	46.12	2328
T9YA20KV01630	1	630	30.2	0.3	4.9	4.31	0.3	41.32	2.6	50.52	2785

ELECTRICAL CHARACTERISTICS 12/20 KV

NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR RESISTANCE Ω/Km	REACTANCE AT 50 HZ ohms/km	CAPACITANCE μF/Km	CURRENT CARRYING CAPACITY A		SHORT CIRCUIT CURRENT 1S kA	
				Trefoil formation:In air @30°C	Trefoil formation:In ground @20°C	Conductor	Screen
50	0.641	0.19	0.15	184	152	4.7	1.74
70	0.443	0.18	0.17	230	186	6.6	1.87
95	0.32	0.18	0.19	280	221	9	2.01
120	0.258	0.17	0.2	324	252	11.3	2.13
150	0.203	0.17	0.22	368	281	14.2	2.26
185	0.164	0.17	0.24	424	317	17.5	2.40
240	0.125	0.16	0.27	502	367	22.7	2.59
300	0.1	0.16	0.29	577	414	28.3	2.77
400	0.0778	0.16	0.32	676	470	37.8	3.04
500	0.0605	0.15	0.35	767	540	47.2	3.27
630	0.0469	0.15	0.4	914	610	59.5	3.55

Conditions for current ratings as below:
Depth of laying: 0.8m, Soil thermal resistivity 1.5km/W.

DIMENSIONS 18/30KV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL CONDUCTOR DIAMETER mm	MINIMUM CONDUCTOR SCREEN THICKNESS mm	NOMINAL INSULATION THICKNESS mm	MINIMUM INSULATION THICKNESS mm	MINIMUM INSULATION SCREEN THICKNESS mm	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
T9YA30KV01050	1	50	8.2	0.3	7.25	6.5	0.3	24.02	2	32.02	767
T9YA30KV01070	1	70	9.8	0.3	7.25	6.5	0.3	25.62	2	33.62	868
T9YA30KV01095	1	95	11.5	0.3	7.25	6.5	0.3	27.32	2	35.32	986
T9YA30KV01120	1	120	12.65	0.3	7.25	6.5	0.3	28.47	2.1	36.67	1106
T9YA30KV01150	1	150	14.4	0.3	7.25	6.5	0.3	30.22	2.1	38.42	1235
T9YA30KV01185	1	185	15.75	0.3	7.25	6.5	0.3	31.57	2.2	39.97	1389
T9YA30KV01240	1	240	18.2	0.3	7.25	6.5	0.3	34.02	2.2	42.42	1609
T9YA30KV01300	1	300	20.5	0.3	7.25	6.5	0.3	36.32	2.3	44.92	1852
T9YA30KV01400	1	400	23	0.3	7.25	6.5	0.3	38.82	2.4	47.62	2231
T9YA30KV01500	1	500	26	0.3	7.25	6.5	0.3	41.82	2.5	50.82	2606
T9YA30KV01630	1	630	30.2	0.3	7.25	6.5	0.3	46.02	2.6	55.22	3084

ELECTRICAL CHARACTERISTICS 18/30 KV

NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR RESISTANCE Ω/Km	REACTANCE AT 50 HZ ohms/km	CAPACITANCE μF/Km	CURRENT CARRYING CAPACITY A		SHORT CIRCUIT CURRENT 1S kA	
				Trefoil formation:In air @30°C	Trefoil formation:In ground @20°C	Conductor	Screen
50	0.641	0.2	0.12	184	152	4.7	2.16
70	0.443	0.2	0.13	230	186	6.6	2.29
95	0.32	0.19	0.14	280	221	9	2.43
120	0.258	0.18	0.15	324	252	11.3	2.55
150	0.203	0.18	0.17	368	281	14.2	2.68
185	0.164	0.18	0.18	424	317	17.5	2.81
240	0.125	0.17	0.2	502	367	22.7	3.00
300	0.1	0.17	0.22	577	414	28.3	3.18
400	0.0778	0.16	0.24	676	470	37.8	3.45
500	0.0605	0.16	0.26	767	540	47.2	3.69
630	0.0469	0.16	0.29	914	610	59.5	3.96

Conditions for current ratings as below:
 Depth of laying: 0.8m, Soil thermal resistivity 1.5km/W.

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.