

FR-N30XA8E-AR AL/XLPE/PE Triplex Cable 18/30kV



CHARACTERISTICS

Voltage Rating U_0/U
18/30 (36)kV

Temperature Rating

Maximum conductor operating temperature: 90°C
Initial temperature at S.C.C for metallic screen: 80°C
Maximum conductor temperature during S.C: 250°C

Minimum Bending Radius

20 x overall diameter

CONSTRUCTION

Conductor

Class 2 stranded Aluminium

Conductor Screen

Extruded Inner Semi Conductor (Bonded Type)

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Extruded Inner Semi Conductor (Strippable Type)

Waterblocking

Semi Conductive Longitudinal Waterblocking Tape

Screen

Aluminum Tape Screen (0.15mm thickness)

Sheath

PE (Polyethylene)

Sheath Colour

● Black

STANDARDS

Gen to NF C 33-226 & HD 620-10G, IEC 60502-2, EN 60228

Halogen Free to: IEC 60754

Impact Resistant to: AG4 EN 60364-5.51

Vibration Resistant to: AH2 EN 60364-5.51

Abrasion and Tear Resistant: EN 60229-4.1

UV Resistant to: AN3 ISO 4892-3

Water Resistant: AD8

Oil Resistant to: ASTM D471

Conductor Flexibility: Stranded class 2

Presence of Corrosive or Polluting Substances to:
AF2 EN 60364-5.51

Termite resistant to: Annex M of NF C33-226

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



SCIENCE
BASED
TARGETS

**BUSINESS
AMBITION FOR 1.5°C**



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

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL CONDUCTOR SCREEN THICKNESS mm	NOMINAL INSULATION THICKNESS mm	NOMINAL INSULATION SCREEN THICKNESS mm	MINIMUM SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	MAXIMUM PULLING TENSION KN/Phase
A9XANF30KV31050	3x1	50	0.6	8	0.7	1.4	72.1	2914	1.5
A9XANF30KV31070	3x1	70	0.6	8	0.7	1.4	75.6	3262	2.1
A9XANF30KV31095	3x1	95	0.6	8	0.7	1.48	78.8	3624	2.85
A9XANF30KV31120	3x1	120	0.6	8	0.7	1.48	81.9	4009	3.6
A9XANF30KV31150	3x1	150	0.6	8	0.7	1.56	87	4536	4.5
A9XANF30KV31185	3x1	185	0.6	8	0.7	1.56	89	4897	5.55
A9XANF30KV31240	3x1	240	0.6	8	0.7	1.64	94.6	5682	7.2
A9XANF30KV31300	3x1	300	0.6	8	0.7	1.72	100.2	6482	9
A9XANF30KV31400	3x1	400	0.6	8	0.7	1.8	106.1	7635	12

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20 °C Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50HZ Ω/Km	CAPACITANCE μF/Km	CHARGING CURRENT A/Km	DIELECTRIC LOSSES W/Km	REACTANCE AT 50 HZ ohm/km	CONDUCTOR S.C.C FOR 1 SEC KA	ALUMINIUM SCREEN S.C.C FOR 1 SEC KA	CURRENT RATING A	
									Laid in ground	Laid in free air
50	0.641	0.822	0.14	0.791	56.91	0.200	4.72	1.34	181	193
70	0.443	0.5682	0.155	0.875	63.00	0.189	6.61	1.41	222	239
95	0.32	0.4106	0.169	0.953	68.64	0.183	8.98	1.11	266	288
120	0.253	0.3247	0.181	1.026	73.86	0.178	11.34	1.16	307	332
150	0.206	0.2646	0.201	1.139	81.98	0.171	14.17	1.26	339	379
185	0.164	0.2109	0.209	1.185	85.29	0.169	17.48	1.26	388	433
240	0.125	0.1612	0.231	1.306	94.06	0.163	22.68	1.36	439	513
300	0.1	0.1294	0.252	1.427	102.78	0.159	28.35	1.46	494	590
400	0.0778	0.1013	0.275	1.553	111.83	0.155	37.79	1.51	568	685

Laying conditions at trefoil formation are as below:

- Soil thermal resistivity 100 °C.Cm/Watt
- Burial depth 0.8 m
- Ground temperature 20 °C
- Air temperature 30 °C
- Frequency 50 Hz

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.