FR-N20XA8E-AR 18/30kV Cable
NF C 33-226 - Cu/XLPE/MDPE

Eland Product Group: A9X

CHARACTERISTICS

Voltage Rating Uo/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 Copper

Conductor Screen
Extruded Inner Semi Conductor (Bonded Type)

Insulation
XLPE (Cross-Linked Polyethylene)

Insulation Screen
Extruded Outer Semi Conductor (Strippable Type)

Tape
Semi Conductive Longitudinal Waterblocking Tape

Aluminium Tape
Applied Longitudinally

Sheath
MDPE (Medium Density Polyethylene)

Sheath Colour
● Black

STANDARDS

NF C 33-226, IEC 60502-2, EN 60228

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.

ISO/IEC 17025 Accredited Testing Laboratory — UKAS TESTING
IECEE CBTL Accredited Testing Laboratory

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®.

RoHS REACH

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL SCREEN CROSS SECTIONAL AREA mm²	NOMINAL CONDUCTOR SCREEN THICKNESS mm	NOMINAL INSULATION THICKNESS mm	NOMINAL INSULATION SCREEN THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9XNF30KV01050	1	50	18	0.6	6.7	0.7	1.9	30.6	1095
A9XNF30KV01070	1	70	20	0.6	6.7	0.7	1.9	32.4	1341
A9XNF30KV01095	1	95	21	0.6	6.7	0.7	2	33.9	1626
A9XNF30KV01120	1	120	22	0.6	6.7	0.7	2.1	35.5	1903
A9XNF30KV01150	1	150	23	0.6	6.7	0.7	2.1	37.1	2210
A9XNF30KV01185	1	185	24	0.6	6.7	0.7	2.2	38.8	2582
A9XNF30KV01240	1	240	25	0.6	6.7	0.7	2.2	41.2	3186
A9XNF30KV01300	1	300	27	0.6	6.7	0.7	2.3	43.8	3797
A9XNF30KV01400	1	400	29	0.6	6.7	0.7	2.4	46.6	4666
A9XNF30KV01500	1	500	31	0.6	6.7	0.7	2.5	50.2	5723
A9XNF30KV01630	1	630	34	0.7	6.7	0.7	2.6	54.9	7173
A9XNF30KV01800	1	800	37	0.7	6.7	0.7	2.8	59.4	9033

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	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	SCREEN S.C.C FOR 1 SEC KA	CURRENT RATING A	
									Laid in ground	Laid in free air
50	0.387	0.4937	0.157	0.887	63.85	0.144	7.15	1.3	276	230
70	0.268	0.3421	0.177	0.999	71.90	0.135	10.02	1.44	331	286
95	0.193	0.2466	0.191	1.079	77.65	0.130	13.59	1.52	228	353
120	0.153	0.1957	0.206	1.164	83.81	0.126	17.17	1.59	376	407
150	0.124	0.159	0.223	1.261	90.80	0.120	21.46	1.66	419	456
185	0.0991	0.1275	0.239	1.352	97.33	0.117	26.47	1.73	473	527
240	0.0754	0.0977	0.264	1.496	107.72	0.111	34.34	1.8	531	621
300	0.0601	0.0787	0.29	1.64	118.07	0.108	42.93	1.95	596	717
400	0.047	0.0627	0.317	1.795	129.24	0.104	57.23	2.09	666	819
500	0.0366	0.0503	0.353	1.997	143.80	0.100	71.54	2.24	748	943
630	0.0283	0.0407	0.4	2.264	163.02	0.097	90.14	2.45	827	1066
800	0.0221	0.0339	0.443	2.506	180.48	0.094	114.47	2.67	902	1196

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

UK T 020 7241 8787 | F 020 7241 8700 | sales@elandcables.com | www.elandcables.com
International T +44 20 7241 8740 | F +44 20 7241 8700 | international@elandcables.com