

FR-N20XA8E-AR Triplex 12/20kV Cable

Gen to NF C 33-226 - AL/XLPE/MDPE



Eland Product Group: A9X

CHARACTERISTICS

Voltage Rating U_0/U
12/20 (24)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

Aluminium Tape

Applied Longitudinally

Sheath

MDPE (Medium Density Polyethylene)

Sheath Colour

● Black

STANDARDS

Gen to NF C 33-226, IEC 60502-2, EN 60228
Halogen free to IEC/EN 60754-1
Water resistant to AD7
UV resistant to ISO 4892

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 SCREEN CROSS SECTIONAL AREA mm ²	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
A9XANF20KV31050	3x1	50	15	0.6	4.5	0.7	2.1	55.7	1845
A9XANF20KV31070	3x1	70	17	0.6	4.5	0.7	1.8	59.6	2197
A9XANF20KV31095	3x1	95	18	0.6	4.5	0.7	1.8	62.9	2509
A9XANF20KV31120	3x1	120	19	0.6	4.5	0.7	1.9	66.3	2872
A9XANF20KV31150	3x1	150	20	0.6	4.5	0.7	1.9	71.1	3287
A9XANF20KV31185	3x1	185	21	0.6	4.5	0.7	2	73.4	3659
A9XANF20KV31240	3x1	240	22	0.6	4.5	0.7	2.1	79.1	4349
A9XANF20KV31300	3x1	300	24	0.6	4.5	0.7	2.1	84.2	5057
A9XANF20KV31400	3x1	400	26	0.6	4.5	0.7	2.3	90.5	6132

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	SCREEN S.C.C FOR 1 SEC KA	CURRENT RATING A	
									Laid in ground	Laid in free air
50	0.641	0.822	0.207	0.78	37.43	0.181	4.72	1.08	175	182
70	0.443	0.5682	0.232	0.876	42.06	0.174	6.61	1.23	216	227
95	0.32	0.4106	0.256	0.966	46.36	0.169	8.98	1.3	258	275
120	0.253	0.3248	0.278	1.049	50.36	0.165	11.34	1.37	297	318
150	0.206	0.2647	0.313	1.18	56.62	0.158	14.17	1.44	329	360
185	0.164	0.211	0.327	1.233	59.18	0.157	17.48	1.52	377	415
240	0.125	0.1613	0.364	1.374	65.97	0.152	22.68	1.59	423	493
300	0.1	0.1296	0.402	1.516	72.75	0.148	28.35	1.73	474	568
400	0.0778	0.1016	0.441	1.662	79.80	0.145	37.79	1.88	547	659

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.