

U3000 AR3V Cable

IEC 60502-1 AL/XLPE/PE 1.8/3 (3.6)kV



APPLICATION

These cables are suitable for all types of low voltage industrial and commercial type connections, particularly in PV plant between LV/MV transformers and between LV Switchboards and distribution board. These cables can be used in cases of high operating temperature and when high resistance to solar radiation and atmospheric agents is required. Good resistance to low temperature and chemical agents. They can be used directly buried, in ducts and in the open air. Suitable for use in waterlogged conditions.

STANDARDS

IEC 60502-1, Generally to NF C32-321, IEC 60228

Zero Halogen to: IEC 60754-1/2

Water Resistant to: EN 60529

Ozone & UV Resistant to: EN ISO 4892-3, EN 50396

Abrasion & Tear Resistant to: EN 60229-4.1

Vibration & Impact Resistant to: EN 60364-5.51-AG2/AH2

Oil Resistant to: ASTM D471

Termite Resistant

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECCE 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 Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab[®].



CHARACTERISTICS

Voltage Rating

AC: 1.8/3 (3.6)kV

DC: 2.7/5.4 kV

Temperature Range

Maximum Conductor Operating Temperature: +90°C

Maximum Conductor Temperature During S.C: +250°C

Minimum Bending Radius

15 x Overall Diameter

CONSTRUCTION

Conductor

Class 2 Stranded Plain Aluminium Circular Compact Conductor

Insulation

XLPE (Cross linked Polyethylene)

Sheath

PE (Polyethylene)

Sheath Colour

● Black



DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OUTER DIAMETER mm	NOMINAL WEIGHT kg/km
A6UA3KV01016PE	1	16	10.9	140
A6UA3KV01025PE	1	25	12	180
A6UA3KV01035PE	1	35	13.1	215
A6UA3KV01050PE	1	50	14.4	265
A6UA3KV01070PE	1	70	16.2	350
A6UA3KV01095PE	1	95	17.7	430
A6UA3KV01120PE	1	120	19.3	530
A6UA3KV01150PE	1	150	21.5	635
A6UA3KV01185PE	1	185	22.6	750
A6UA3KV01240PE	1	240	25.2	935
A6UA3KV01300PE	1	300	27.5	1125
A6UA3KV01400PE	1	400	30.4	1410
A6UA3KV01500PE	1	500	34.3	1775
A6UA3KV01630PE	1	630	38.4	2280

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT 50 Hz Ω/Km	CURRENT RATING		
			Laid in ground	Laid in duct	Laid in free air
16	1.91	2.435	102	74	85
25	1.2	1.53	131	96	112
35	0.868	1.107	157	115	137
50	0.641	0.817	185	137	166
70	0.443	0.565	227	170	210
95	0.32	0.408	271	205	257
120	0.253	0.323	309	236	300
150	0.206	0.263	346	267	343
185	0.164	0.209	393	306	398
240	0.125	0.159	456	361	475
300	0.1	0.128	516	414	551
400	0.0778	0.099	590	478	648
500	0.0605	0.077	673	557	763
630	0.469	0.06	765	645	892

Laying conditions at trefoil formation are as below:

- Soil thermal resistivity: 120°C.Cm/Watt
- Burial depth: 0.5m
- Ground temperature: 15°C | Air temperature: 25°C | Frequency: 50Hz

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.