U3000 AR3V Cable
IEC 60502-1 AL/XLPE/PVC 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.

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
PVC (Polyvinyl Chloride)

Sheath Colour
● Black

STANDARDS

IEC 60502-1, IEC 60228,
UV resistant ISO 4892
Water resistant to AD8

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 is compliant with European Regulation EN 50575, the Construction Products Regulation.

Eca

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®.

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL OUTER DIAMETER mm	NOMINAL WEIGHT kg/km
A6UA3KV01016	1	16	10.9	140
A6UA3KV01025	1	25	12	180
A6UA3KV01035	1	35	13.1	215
A6UA3KV01050	1	50	14.4	265
A6UA3KV01070	1	70	16.2	350
A6UA3KV01095	1	95	17.7	430
A6UA3KV01120	1	120	19.3	530
A6UA3KV01150	1	150	21.5	635
A6UA3KV01185	1	185	22.6	750
A6UA3KV01240	1	240	25.2	935
A6UA3KV01300	1	300	27.5	1125
A6UA3KV01400	1	400	30.4	1410
A6UA3KV01500	1	500	34.3	1775
A6UA3KV01630	1	630	38.4	2280

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	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

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