



## UKPN 6.35/11 (12)kV Single Alu Core (Triplex)

**Unarmoured Aluminium Conductors** 





### **DESCRIPTION**

Conductor: Stranded or Solid Aluminium Conductor, Conductor Screen: Fully bonded semi-conductive compound, Insulation: XLPE (Cross-Linked Polyethylene), Insulation Screen: Semi-conductive compound, Screen: Aluminium Wires, Separator: Binding Tape, Sheath: MDPE (Medium Density Polyethylene) - colour RED.

APPLICATION	TECHNICAL DATA
Aluminium power cables designed for medium voltage distribution networks, compliant with the specifications of UK Power Networks (UKPN), and produced by G81-approved suppliers. These cables are intended for use in connecting existing grids to emerging sub-main developments.	Voltage Rating (Uo/U): 6.35/11 (12)kV  Temperature Rating: 0°C to +90°C  Standards/Approvals: IEC 60502-2

**TDS 1 OF 2** 









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DIMENSIONS						
NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NOMINAL AREA OF METALLIC SCREEN	NOMINAL OVERALL DIAMETER OF TRIPLEX GROUP	NOMINAL WEIGHT OF TRIPLEX GROUP	MINIMUM BENDING RADIUS	MAXIMUM PULLING TENSION
	mm²	mm²	mm	Kg/Km	mm	N
3x1 (Triplex)	95	58	59.0 - 65.5	2400	920	8550
3x1 (Triplex)	185	115	70.8 - 75.0	4050	1060	16650
3x1 (Triplex)	300	115	81.5 - 84.6	5300	1220	27000

#### ALL FIGURES QUOTED ARE APPROXIMATE

ELECTRICAL CHARACTERISTICS						
NOMINAL CROSS SECTIONAL AREA	MAX. DC RES. OF CONDUCTOR AT 20°C	MAX. AC RES. OF CONDUCTOR AT 20°C	REACTANCE AT 50HZ	CAPACITANCE	1sec SHORT CIRCUIT RATING OF CONDUCTOR	1sec SHORT CIRCUIT RATING OF METALLIC SCREEN
mm²	Ω/Km	Ω/Km	Ω/Km	μf/Km	kA	kA
95	0.320	0.411	0.056	0.381	9.2	7.1
185	0.164	0.211	0.054	0.488	17.9	12.9
300	0.100	0.130	0.053	0.594	28.8	12.9

#### ALL FIGURES QUOTED ARE APPROXIMATE

CURRENT CARRYING CAPACITY				
NOMINAL CROSS SECTIONAL AREA	DIRECT BURIED	IN DUCTS	IN AIR	
mm²	А	А	А	
95	244	227	232	
185	353	328	364	
300	461	429	508	

#### ALL FIGURES QUOTED ARE APPROXIMATE

CURRENT RATING CONDITIONS					
GROUND TEMP. AMBIENT AIR TEMP.		DEPTH OF BURIAL (TO TOP OF CABLE)	THERMAL RESISTANCE OF SOIL		
15°C	25°C	450mm	1.2oC m/W		

E&OE. Manufacturers reserve the right to amend the specification without prior notice.

**TDS 2 OF 2** 



