UKPN 6.35/11 (12)kV Single Core (Triplex) Unarmoured Aluminium Conductors

APPLICATION
Medium voltage DNO aluminium power cable approved to UK Power Networks (UKPN) specification and manufactured by G81 suppliers for connections from existing grid to new sub-main developments.

CHARACTERISTICS

Voltage Rating (Uo/U)
6.35/11 (12)kV

Temperature Rating
0°C to +90°C

CONSTRUCTION

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)

Sheath Colour
Red

STANDARDS
BS 7870-4.10

ISO/IEC 17025 LABORATORY TESTED
This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.

REGULATORY COMPLIANCE
This cable meets the requirements of the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.
## DIMENSIONS

<table>
<thead>
<tr>
<th>ELAND PART NO.</th>
<th>NO. OF CORES</th>
<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>NOMINAL AREA OF METALLIC SCREEN mm²</th>
<th>NOMINAL OVERALL DIAMETER OF CABLE (OR TRIPLEX GROUP IF APPLICABLE) mm</th>
<th>NOMINAL WEIGHT OF CABLE (OR TRIPLEX GROUP IF APPLICABLE) kg</th>
<th>MINIMUM BENDING RADIUS mm</th>
<th>MAXIMUM PULLING TENSION N</th>
</tr>
</thead>
<tbody>
<tr>
<td>D106013RD000</td>
<td>3x1 (Triplex)</td>
<td>95</td>
<td>58</td>
<td>59.0-65.5</td>
<td>2400</td>
<td>920</td>
<td>8550</td>
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<tr>
<td>D106016RD000</td>
<td>3x1 (Triplex)</td>
<td>185</td>
<td>115</td>
<td>70.8-75.0</td>
<td>4050</td>
<td>1060</td>
<td>16650</td>
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<tr>
<td>D106018RD000</td>
<td>3x1 (Triplex)</td>
<td>300</td>
<td>115</td>
<td>81.5-84.6</td>
<td>5300</td>
<td>1220</td>
<td>27000</td>
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</table>

## ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km</th>
<th>MAXIMUM AC RESISTANCE OF CONDUCTOR AT 20°C ohms/km</th>
<th>REACTANCE AT 50HZ ohms/km</th>
<th>CAPACITANCE µF/km</th>
<th>1 SECOND SHORT CIRCUIT RATING OF CONDUCTOR kA</th>
<th>1 SECOND SHORT CIRCUIT RATING OF METALLIC SCREEN kA</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>0.320</td>
<td>0.411</td>
<td>0.056</td>
<td>0.381</td>
<td>9.2</td>
<td>7.1</td>
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<tr>
<td>185</td>
<td>0.164</td>
<td>0.211</td>
<td>0.054</td>
<td>0.488</td>
<td>17.9</td>
<td>12.9</td>
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<tr>
<td>300</td>
<td>0.100</td>
<td>0.130</td>
<td>0.053</td>
<td>0.594</td>
<td>28.8</td>
<td>12.9</td>
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## CURRENT CARRYING CAPACITY

<table>
<thead>
<tr>
<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>DIRECT BURIED Amps</th>
<th>IN DUCTS Amps</th>
<th>IN AIR Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>244</td>
<td>227</td>
<td>232</td>
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<tr>
<td>185</td>
<td>353</td>
<td>328</td>
<td>364</td>
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<tr>
<td>300</td>
<td>461</td>
<td>429</td>
<td>508</td>
</tr>
</tbody>
</table>

Current rating conditions:
- Ground temperature : 15°C
- Ambient air temperature : 25°C
- Depth of burial (to top of cable) : -450mm
- Thermal resistance of soil : 1.2°C m/W

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.