# SPEN 6.35/11 (12)kV Single Core Unarmoured Aluminium Conductors 

## APPLICATION

Medium voltage DNO aluminium power cable approved to Scottish Power Energy Networks (SPEN) 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

$0^{\circ} \mathrm{C}$ to $+90^{\circ} \mathrm{C}$

## CONSTRUCTION

## Conductor

Class 1 Solid Aluminium Conductor

## Conductor Screen

Fully bonded semi-conductive compound

## Insulation

XLPE (Cross-Linked Polyethylene)

## Insulation Screen

Semi-conductive compound

## Screen

Copper Wires and Equalising Copper Tape

## Separator

Binding tape

## Sheath

MDPE (Medium-Density Polyethylene)

## Sheath Colour

- Red


## STANDARDS

BS 7870-4.10, SP-PS-076

SP ENERGY NETWORKS

## THE CABLE LAB ${ }^{\circledR}$

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
$\underset{\text { AMBITION FOR } 1.50^{\circ} \mathrm{C}}{\text { BUSINESS }}$

## 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 ${ }^{\circledR}$.


DIMENSIONS

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA $\mathrm{mm}^{2}$ | NOMINAL AREA OF metallic screen $\mathrm{mm}^{2}$ | NOMINAL OVERALL DIAMETER of CABLE (OR TRIPLEX GROUP IF APPLICABLE) $\mathrm{mm}^{2}$ | NOMINAL WEIGHT OF CABLE (OR TRIPLEX GROUP IF APPLICABLE) kg | MINIMUM BENDING RADIUS mm | MAXIMUM PULLING TENSION <br> N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D510113RD000 | 1 | 95 | 35 | 27 | 980 | 510 | 2850 |
| D510116RD000 | 1 | 185 | 35 | 32 | 1320 | 605 | 5550 |
| D510118RD000 | 1 | 300 | 35 | 37 | 1750 | 700 | 9000 |

## ELECTRICAL CHARACTERISTICS

| NOMINAL CROSS SECTIONAL AREA $\mathrm{mm}^{2}$ | MAXIMUM DC RESISTANCE OF CONDUCTOR AT $20^{\circ} \mathrm{C}$ ohms/km | MAXIMUM AC RESISTANCE OF CONDUCTOR AT $20^{\circ} \mathrm{C}$ ohms/km | REACTANCE AT 50 HZ ohms/km | CAPACITANCE $\mu \mathrm{f} / \mathrm{km}$ | 1 SECOND SHORT CIRCUIT RATING OF CONDUCTOR kA | 1 SECOND SHORT CIRCUIT Rating of metallic screen kA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95 | 0.320 | 0.411 | 0.119 | 0.31 | 8.9 | 5.0 |
| 185 | 0.164 | 0.211 | 0.107 | 0.40 | 17.5 | 5.0 |
| 300 | 0.100 | 0.130 | 0.100 | 0.49 | 28.3 | 5.0 |

## CURRENT CARRYING CAPACITY

| NOMINAL CROSS SECTIONAL AREA <br> $m^{2}$ | DIRECT BURIED <br> Amps | IN DUCTS <br> Amps | IN AIR <br> Amps |
| :---: | :---: | :---: | :---: |
| 95 | 255 | 226 | 296 |
| 185 | 368 | 326 | 446 |
| 300 | 481 | 425 | 605 |

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.

