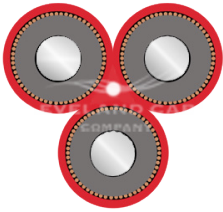


UK POWER NETWORKS APPROVED TRIPLEX CABLE 11KV



APPLICATION

UKPN approved medium voltage aluminium power cable for connections from electrical grid to sub-main developments. Suitable for power networks, underground, outdoors and installation in cable ducting.

CABLE STANDARDS

BS7870 4.10
 BS EN 60228
 UV STABILISED
 DNO Cable approved for UKPN use

CONSTRUCTION

Conductor: Solid Aluminium Conductors
Insulation: Cross Link Polyethylene (XLPE)
Metallic Screen: Aluminium Wires
Water Blocking: Tape, Helically applied
Sheath: Medium Density Polyethylene (MDPE)
Sheath Colour: ■ Red

CHARACTERISTICS

Voltage Rating: 6350V / 11000V (11kV)
Temperature Limits: 0°C to +90°C
Minimum Bending Radius: As per cable manufacturer datasheet

CORE IDENTIFICATION

Single Core: ■ Brown ■ Black ■ Grey Tapes
Triplex

Should not be installed at temperatures below 0°C

TRIPLEX CABLE - DIMENSIONS

| CCC CODE | CONDUCTOR SIZE (MM ²) | CONDUCTOR TYPE | NOMINAL DIAMETER (MM) | MAXIMUM VOLTAGE RATING | WEIGHT (KG/KM) | APPROX OVERALL DIAMETER |
|---------------------|-----------------------------------|----------------|-----------------------|------------------------|----------------|-------------------------|
| UKPN11KVTRIP3X95AL | 95 | SOLID | 12.16 | 11KV | 2901 | 57.83 |
| UKPN11KVTRIP3X185AL | 185 | SOLID | 15.8 | 11KV | 4060 | 72.5 |
| UKPN11KVTRIP3X300AL | 300 | SOLID | 20.5 | 11KV | 5360 | 81.4 |

TRIPLEX CABLE 11KV – ELECTRICAL CHARACTERISTICS

| NOMINAL CROSS SECTIONAL AREA (MM ²) | MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C OHMS/KM | MAXIMUM AC RESISTANCE OF CONDUCTOR AT 90°C OHMS/KM | REACTANCE AT 50HZ OHMS/KM | CAPACITANCE (MF/KM) | 1 SECOND SHORT CIRCUIT RATING OF CONDUCTOR kA | 1 SECOND SHORT CIRCUIT RATING OF METALLIC SCREEN kA |
|---|--|--|---------------------------|---------------------|---|---|
| 95 | 0.320 | 0.411 | 0.120 | 0.320 | 8.9 | 5.3 |
| 185 | 0.164 | 0.211 | 0.110 | 0.410 | 17.4 | 10.30 |
| 300 | 0.100 | 0.130 | 0.130 | 0.500 | 28.3 | 10.30 |

TRIPLEX CABLE – CURRENT CARRYING CAPACITY

| MAX VOLTAGE RATING | MUTUAL CAPACITANCE pF/m | | | |
|--------------------|---|----------------------------|----------------------------|---------------------------|
| | NOMINAL CROSS SECTIONAL AREA (MM ²) | IN GROUND AMPS SEE NOTE 1* | IN DUCTS AMPS SEE NOTE 2** | IN AIR AMPS SEE NOTE 3*** |
| 11kV | 95 | 221 | 230 | 280 |
| 11kV | 185 | 317 | 303 | 424 |
| 11kv | 300 | 437 | 397 | 577 |

NOTE 1* GROUND TEMPERATURE = 20°C, DEPTH = 0.8M, THERMAL RESISTIVITY OF SOIL -1.5K.M/W

NOTE 2** AS NOTE 1* BUT 1 CABLE PER DUCT

NOTE 3*** AMBIENT TEMPERATURE = 30°C

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.