

## 12/20 (24) KV Multi Core STA Cables

Three Core Cables, with stranded Circular copper or Aluminum conductors, XLPE insulated, copper tape or wire as metallic insulation screen, cores are assembled together with non-hygroscopic polypropylene fillers and wrapped with binder tape, covered with a layer of PVC compound as bedding, steel tape armored and PVC sheathed.



• Cables are produced according to IEC 60502.

| Nominal Cross-sectional area | Max. Conductor Resistance |             | Capacitance | Reactance | Current Rating |                           | Approx. Overall Diameter | Approx. Weight |
|------------------------------|---------------------------|-------------|-------------|-----------|----------------|---------------------------|--------------------------|----------------|
|                              | DC at 20 °C               | AC at 90 °C |             |           | Ground         | Laid in free air (Shaded) |                          |                |
| mm <sup>2</sup>              | Ω/Km                      | Ω/Km        | μf/km       | Ω/Km      | A              | A                         | Mm                       | Kg/Km          |

### 3 Core - Cu/XLPE/STA/PVC

|     |        |        |      |      |     |     |     |       |
|-----|--------|--------|------|------|-----|-----|-----|-------|
| 150 | 0.124  | 0.1592 | 0.26 | 0.1  | 360 | 370 | 76  | 9500  |
| 185 | 0.0991 | 0.1279 | 0.28 | 0.1  | 390 | 400 | 81  | 10400 |
| 240 | 0.0754 | 0.0982 | 0.32 | 0.1  | 450 | 465 | 87  | 13500 |
| 300 | 0.0601 | 0.0794 | 0.35 | 0.09 | 495 | 530 | 92  | 15800 |
| 400 | 0.047  | 0.0636 | 0.39 | 0.09 | 555 | 600 | 100 | 19000 |
| 500 | 0.0366 | 0.0514 | 0.43 | 0.09 | 700 | 745 | 110 | 22700 |

### 3 Core - AL/XLPE/STA/PVC

|     |        |        |      |      |     |     |     |       |
|-----|--------|--------|------|------|-----|-----|-----|-------|
| 150 | 0.206  | 0.2648 | 0.26 | 0.1  | 265 | 300 | 76  | 6800  |
| 185 | 0.164  | 0.2112 | 0.28 | 0.1  | 305 | 345 | 81  | 7100  |
| 240 | 0.125  | 0.1615 | 0.32 | 0.1  | 345 | 370 | 87  | 9000  |
| 300 | 0.1    | 0.1299 | 0.35 | 0.09 | 390 | 420 | 92  | 10100 |
| 400 | 0.0778 | 0.1020 | 0.39 | 0.09 | 435 | 480 | 100 | 11900 |
| 500 | 0.0605 | 0.0806 | 0.43 | 0.09 | 570 | 620 | 110 | 13400 |

The above data is approximate and subjected to manufacturing tolerance.

Cable constructed are based on :

|                             |             |
|-----------------------------|-------------|
| Insulation thickness        | 5.5mm       |
| PVC ST2 90 °C               | Sheath      |
| Ambient temperature         | 45 °C       |
| Ground temperature          | 30 °C       |
| Thermal resistivity of soil | 120 °C cm/w |
| Depth of laying             | 80 cm       |
| Trefoil Formation           |             |