



CONGO CABLES AND TRANSFORMERS SAS



TECHNICAL DATASHEET (TDS)

Cable Description :2C X 1.5 Sq.mm, Flexible Copper Conductor, PVC Insulated unsheathed Wire 0.6/1KV

| | |
|--------------------|-----------------------------|
| Make | CONGO CABLES & TRANSFORMERS |
| Description | CU/PVC-FR |
| Reference Standard | As per SANS:1574-3 |
| Voltage Grade | 600/1000 VOLT |

Features

| | |
|---------------------------------|-------|
| Operating Temperature | 70°C |
| Max. Temp. During Short Circuit | 160°C |

Application

For outdoor fixed installation and its normally used for power distribution in urban network and industrial plants

Suitable for laying in ducts or on trays in free air

Construction

| S.No. | Description of Parameter | Unit | Particulars |
|-------|--|--------|---|
| 1 | Conductor | | |
| 1.1 | Material/Grade | | Copper Conductor Class - 5 (As per SANS 1411-1) |
| 1.2 | Application | | Flexible |
| 1.3 | Size of Single Wire in Bunched(Max.) | mm | 0.26 |
| 1.4 | Nom. Cross Section Area of Cond. | Sq.mm | 1.5 |
| 1.5 | D.C Conductor Resistance at 20°C (Max.) | Ω / Km | 13.3 |
| 2 | Insulation | | |
| 2.1 | Material | | Extruded PVC -D 3 |
| 2.2 | Colour of Insulated Core | | AS PER CUSTOMER REQUIREMENT |
| 2.3 | Insulation Thickness (Nom) | mm | 0.80 |
| 2.4 | Insulation Thickness (Min) | mm | 0.62 |
| 2.5 | Over all Diameter of cable(Approx) | mm | 3.2 |
| 2.6 | Colour of Insulated Core | mm | RED BLACK |
| 3 | Laying Up | | |
| 3.1 | Application | | All Cores laidup together suitable lay with right hand lay |
| 4 | Outer Sheath | | |
| 4.1 | Material | | Extruded PVC S-3 |
| 4.2 | Colour of Outer Sheath | | BLACK |
| 4.3 | Over all Diameter of cable(Approx) | mm | 9.6 |
| 4.4 | Outer Sheath Thickness (Nominal) | mm | 1.60 |
| 4.5 | Outer Sheath Thickness (Min) | mm | 1.26 |
| 4.6 | Height Of Marking (Max.) | mm | 13 mm (Max.) and Min (3.0 mm) |
| 4.8 | Gap Of Marking End Of The one Legend and Beginning of the next Legend(Max.) | mm | 550 mm |
| 5 | Physical Parameter for Finished Cables | | |
| | Before Ageing (INSULATION & SHEATHING) | | |
| 5.1 | Tensile Stregh (Min) | Mpa | 10 |
| 5.2 | Elongation (Min) | % | 150 |
| 5.3 | After Ageing (INSULATION & SHEATHING) | | 80°C , 168 HRS |
| 5.4 | Tensile Stregh (Min) | | |
| 5.5 | Variation from unaged value, max. | % | ±20 |
| 5.6 | Elongation (Min) | | |
| 5.7 | Variation from unaged value, max. | % | ±20 |
| 5.8 | Limiting Oxygen Index (Min.) | % | 27 |
| 5.9 | Heat Shock (+150°C) | Visual | No sign of internal or external cracking |
| 5.11 | Bending in Low Temperature (-15 °C) | Visual | No sign of internal or external cracking |
| | Resistance to burning | | |
| 5.12 | Top support to char onset, min. | mm | 50 |
| 5.13 | Top support to char lower end, max | mm | 540 |
| | Hot Deformation Test | | |
| 5.14 | Temperature (tolerance ± 2 °C) | °C | 80 |
| 5.15 | Depth of indentation, max | % | 50 |
| 6 | Electrical Data fpr Finshed Cable | | |
| 6.1 | D.C Conductor Resistance at 20°C (Max.) | Ω/Km | 13.3 |
| 6.2 | Insulation resistancea at 70 °C (Min) | mΩ- km | 0.01000 |
| 6.3 | Insulation Volume Resistivity At 23 °C | Ω-M | 2 x 10 ¹¹ |
| 7 | Packing | | |
| 7.1 | Marking over the Cable | | CONGO CABLES & TRANSFORMERS , 2C X 1.5 SQ.MM, 600/1000 VOLT SANS 1574-3 , Year of Manufacturing |
| 7.2 | Sequentail Length Marking | Meters | Shall be provided on surface at every one Meter |
| 7.3 | Cable Length | Meters | Multiple of 100/250/500/1000 or as per Requirement |
| 7.4 | Type of Drum | | Wooden Drum Fully Packed with Lagging and Coils in wrapping |