



CONGO CABLES AND TRANSFORMERS SAS



TECHNICAL DATASHEET (TDS)

Cable Description : 2C X 2.5 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	2.5
1.5	D.C Conductor Resistance at 20°C (Max.)	Ω / Km	7.98
2	Insulation		
2.1	Material		Extruded PVC -D 3
2.2	Colour of Insulated Core		AS PER CUSTOMER REQUIRMENT
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	3.7
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	10.6
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)
4.7	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
	After Ageing (INSULATION & SHEATHING)		80°C , 168 HRS
5.3	Tensile Stregh (Min)		
5.4	Variation from unaged value, max.	%	±20
5.5	Elongation (Min)		
5.6	Variation from unaged value, max.	%	±20
5.7	Limiting Oxygen Index (Min.)	%	27
5.8	Heat Shock (+150°C)	Visual	No sign of internal or external cracking
5.9	Bending in Low Temperature (-15 °C)	Visual	No sign of internal or external cracking
5.11	Resistance to burning		
5.12	Top support to char onset, min.	mm	50
5.13	Top support to char lower end, max	mm	540
5.14	Hot Deformation Test		
	Temperature (tolerance ± 2 °C)	°C	80
5.15	Depth of indentation, max	%	50
6	Electrical Data fpr Finished Cable		
6.1	D.C Conductor Resistance at 20°C (Max.)	Ω/Km	7.98
6.2	Insulation resistancea at 70 °C (Min)	mΩ- km	0.00900
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 2.5 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