

TECHNICAL DATA SHEET LOW VOLTAGE POWER CABLE

Cable Description:

Cu / XLPE / SWA / PVC 1kV 4X50 mm² SM
IEC 60502-1 FR-IEC 60332-1

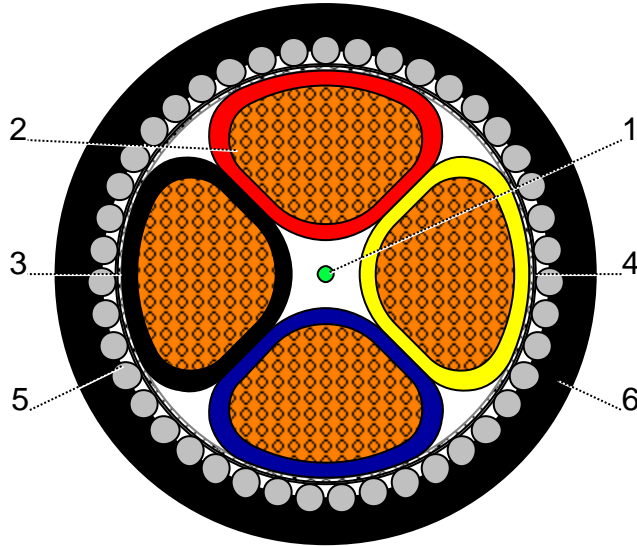
Design and Construction Data:		
Reference Manufacturing Standards		IEC/BS EN 60228, IEC 60502-1
Max. Permissible Continuous Conductor Temp	°C	90
Max. Conductor Short Circuit Temp for 5 Seconds	°C	250
Rated Voltage ' U ₀ / U '	kV	0.6 / 1.0
Number of Conductors x Cross-Section	mm ²	4 x 50
Conductor Material & Shape		Copper & Stranded Class 2 Compacted Sector Shape
Insulation Material		XLPE
Conductor Nominal Insulation Thickness	mm	1.00
Insulation Color		RED, YELLOW, BLUE, BLACK
Armour Material Type		Galvanized Steel Wire
Outer Sheath Material		PVC - ST2, flame retardant
Colour of Outer Sheath		BLACK
Approximate Cable Overall Diameter	mm	30.6
Electrical Data:		
Max Conductor DC resistance @ 20 °C	ohms/km	0.3870
Max Conductor AC resistance @ 90 °C	ohms/km	0.4942
Max Conductor Short Circuit Current @ 1 Second	kA	7.15
Current Carry Capacity		
Laid in air @ 40 °C Ambient Temperature		
Free In Air	A	182
Laid in Ground		
Direct Laid	A	188
Laid in Ground with the following conditions: Ambient Ground Temperature: 35 °C Depth of laying in ground: 0.5 m Soil Thermal Resistivity: 1.2 °K.m/W		
Additional Data:		
Maximum pulling Tension	kN	10.00
Maximum side wall pressure	kN/m	40.8
Minimum Bending Radius	mm	245
The Cable shall meet all Test requirements of:	IEC/BS EN 60228, IEC 60502-1, IEC 60332-1	
Packing Data:		
Drum Type		Non-Returnable
Length of Cable per drum (± 5%)	m	1000
Drum Dimensions "Height x Width" (Approx.)	m	1.7 x 1.01
Gross Weight (Approximate without Lagging)	kg	2,953

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Cable Marking:

BAHRA CABLES CO. KSA 4 X 50 mm² Cu / XLPE / SWA / PVC 600 / 1000 V IEC 60502-1 FR IEC 60332-1
Manufacturing Year - Meter marked

Cable Drawing



Description	Cu / XLPE / SWA / PVC 1kV 4X50 mm ² SM	Approx. Diameter
1	Non-Hygroscopic Filler	-
2	Core	
	Stranded Copper Conductor with sectored shape	10.7 X 7.54
	XLPE insulated	12.7 X 9.54
3	Polymeric Tape	22.11
4	PVC Compound	23.87
5	Galvanized Steel Wire Armour (SWA)	26.95
6	PVC Outer Sheathing	30.59