

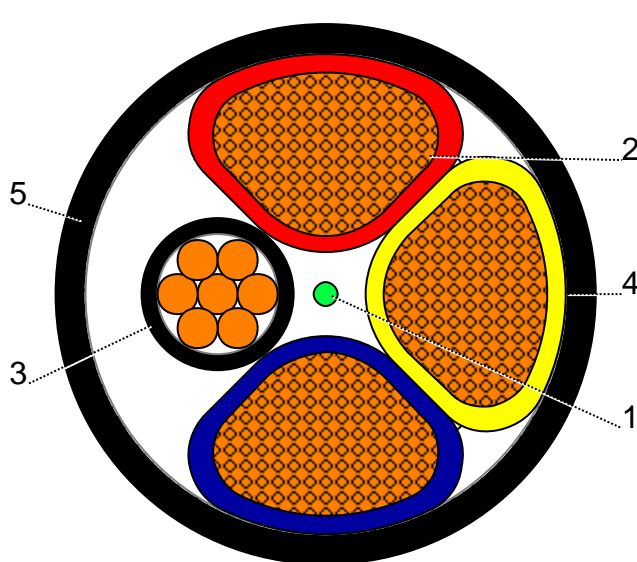
TECHNICAL DATA SHEET LOW VOLTAGE POWER CABLE

Cable Description:

Cu / XLPE / PVC 1kV 3X35 mm² SM+16 mm² RM
IEC 60502-1

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 Phase Conductors x Cross-Section	mm ²	3 x 35
Phase Conductor Material & Shape		Copper & Stranded Class 2 Compacted Sector Shape
Number of Reduced Conductors x Cross-Section		1 x 16
Reduced Conductor Material & Shape		Copper & Stranded Class 2 non-compacted Round Shape
Insulation Material		XLPE
Phase Conductor Nominal Insulation Thickness	mm	0.90
Reduced Conductor Nominal Insulation Thickness	mm	0.70
Insulation Color		RED, YELLOW, BLUE, BLACK
Outer Sheath Material		PVC - ST2
Colour of Outer Sheath		BLACK
Approximate Cable Overall Diameter	mm	22.5
Electrical Data:		
Max Phase Conductor DC resistance @ 20 °C	ohms/km	0.5240
Max Phase Conductor AC resistance @ 90 °C	ohms/km	0.6687
Max Reduced Conductor DC resistance @ 20 °C	ohms/km	1.1500
Max Phase Conductor Short Circuit Current @ 1 Second	kA	5.00
Current Carry Capacity		
Laid in air @ 40 °C Ambient Temperature		
Free In Air	A	142
In Pipes	A	107
Laid in Ground		
Direct Laid	A	157
Laid In Duct	A	125
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	5.25
Maximum side wall pressure	kN/m	29.2
Minimum Bending Radius	mm	180
The Cable shall meet all Test requirements of: IEC/BS EN 60228, IEC 60502-1		
Packing Data:		
Drum Type		Non-Returnable
Length of Cable per drum (± 5%)	m	500
Drum Dimensions "Height x Width" (Approx.)	m	1.1 x 0.81
Gross Weight (Approximate without Lagging)	kg	708

TECHNICAL DATA SHEET **LOW VOLTAGE POWER CABLE**

Cable Marking:		
BAHRA CABLES CO. KSA 3 X 35 + 16 mm ² Cu / XLPE / PVC 600 / 1000 V IEC 60502-1 Manufacturing Year - Meter marked		
Cable Drawing		
		
Description	Cu / XLPE / PVC 1kV 3X35 mm ² SM+16 mm ² RM	Approx. Diameter
1	Non-Hygroscopic Filler	-
2	Core	
	Stranded Copper Conductor with sectorial shape	9.33 X 6.52
	XLPE insulated	11.13 X 8.32
3	Core	
	Stranded Copper Conductor with round shape	4.95
	XLPE insulated	6.35
4	Polymeric Tape	19.25
5	PVC Outer Sheathing	22.52