

## TECHNICAL DATA SHEET LOW VOLTAGE POWER CABLE

Cable Description:

Cu / XLPE / PVC 1kV 3X25 mm<sup>2</sup> RM+16 mm<sup>2</sup> RM  
IEC 60502-1

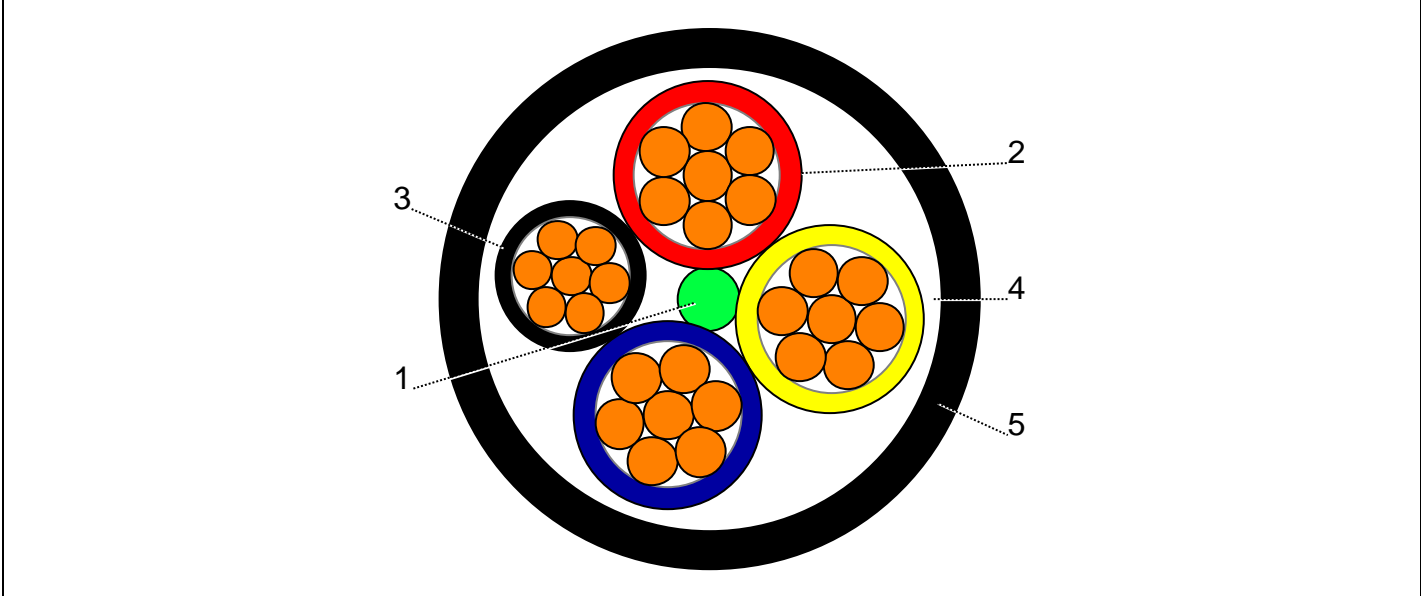
Design and Construction Data:		
Reference Manufacturing Standards		IEC/BS EN 60228, IEC 60502-1
Max. Permissible Continuous Conductor Temp	°C	90
Max. Conductor Short Circuit Temp for 5 Seconds	°C	250
Rated Voltage ' U <sub>0</sub> / U '	kV	0.6 / 1.0
Number of Phase Conductors x Cross-Section	mm <sup>2</sup>	3 x 25
Phase Conductor Material & Shape		Copper & Stranded Class 2 non-compacted Round 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	23.0
Electrical Data:		
Max Phase Conductor DC resistance @ 20 °C	ohms/km	0.7270
Max Phase Conductor AC resistance @ 90 °C	ohms/km	0.9275
Max Reduced Conductor DC resistance @ 20 °C	ohms/km	1.1500
Max Phase Conductor Short Circuit Current @ 1 Second	kA	3.58
Current Carry Capacity		
Laid in air @ 40 °C Ambient Temperature		
Free In Air	A	118
In Pipes	A	90
Laid in Ground		
Direct Laid	A	128
Laid In Duct	A	104
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	3.75
Maximum side wall pressure	kN/m	20.4
Minimum Bending Radius	mm	184
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	1000
Drum Dimensions "Height x Width" (Approx.)	m	1.4 x 1.01
Gross Weight (Approximate without Lagging)	kg	1,344

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**Cable Marking:**

BAHRA CABLES CO. KSA 3 X 25 + 16 mm<sup>2</sup> Cu / XLPE / PVC 600 / 1000 V IEC 60502-1 Manufacturing Year - Meter marked

**Cable Drawing**



Description	Cu / XLPE / PVC 1kv 3X25 mm <sup>2</sup> RM+16 mm <sup>2</sup> RM	Approx. Diameter
1	Non-Hygroscopic Filler	-
2	Core	
	Stranded Copper Conductor with round shape	6.26
	XLPE insulated	8.06
3	Core	
	Stranded Copper Conductor with round shape	4.95
	XLPE insulated	6.35
4	PVC Compound	19.73
5	PVC Outer Sheathing	23

