

## TECHNICAL DATA SHEET LOW VOLTAGE POWER CABLE

Cable Description:

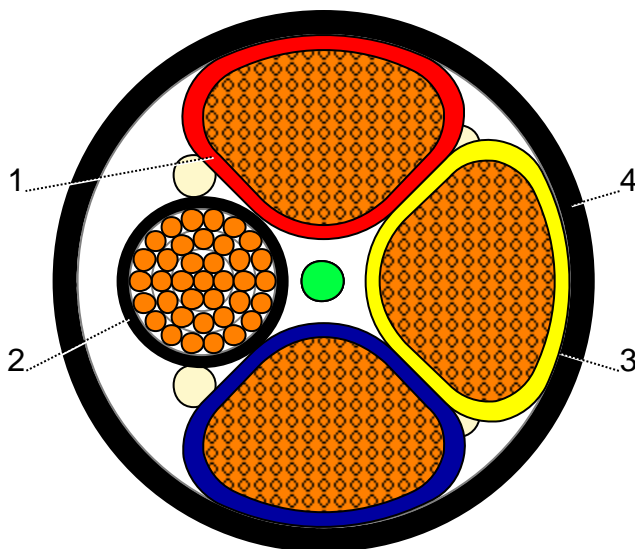
Cu / XLPE / PVC 1kV 3X240 mm<sup>2</sup> SM+120 mm<sup>2</sup> RM  
IEC 60502-1 FR-IEC 60332-1

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 <sub>0</sub> / U'	kV	0.6 / 1.0
Number of Phase Conductors x Cross-Section	mm <sup>2</sup>	3 x 240
Phase Conductor Material & Shape		Copper & Stranded Class 2 Compacted Sector Shape
Number of Reduced Conductors x Cross-Section		1 x 120
Reduced Conductor Material & Shape		Copper & Stranded Class 2 non-compacted Round Shape
Insulation Material		XLPE
Phase Conductor Nominal Insulation Thickness	mm	1.70
Reduced Conductor Nominal Insulation Thickness	mm	1.20
Insulation Color		RED, YELLOW, BLUE, BLACK
Outer Sheath Material		PVC - ST2
Colour of Outer Sheath		BLACK
Approximate Cable Overall Diameter	mm	51.6
Electrical Data:		
Max Phase Conductor DC resistance @ 20 °C	ohms/km	0.0754
Max Phase Conductor AC resistance @ 90 °C	ohms/km	0.0999
Max Reduced Conductor DC resistance @ 20 °C	ohms/km	0.1530
Max Phase Conductor Short Circuit Current @ 1 Second	kA	34.32
Current Carry Capacity		
Laid in air @ 40 °C Ambient Temperature		
Free In Air	A	496
In Pipes	A	346
Laid in Ground		
Direct Laid	A	458
Laid In Duct	A	372
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	36.00
Maximum side wall pressure	kN/m	87.2
Minimum Bending Radius	mm	413
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	250
Drum Dimensions "Height x Width" (Approx.)	m	1.6 x 1.01
Gross Weight (Approximate without Lagging)	kg	2233

# **TECHNICAL DATA SHEET** **LOW VOLTAGE POWER CABLE**

**Cable Marking:**

BAHRA CABLES CO. KSA 3 X 240 + 120 mm<sup>2</sup> Cu / XLPE / PVC 600 / 1000 V IEC 60502-1 FR IEC 60332-1  
Manufacturing Year - Meter marked

**Cable Drawing**


Description	Cu / XLPE / PVC 1kV 3X240 mm <sup>2</sup> SM+120 mm <sup>2</sup> RM	Approx. Diameter
1	Core	
	Stranded Copper Conductor with sectored shape	24.65 X 17.3
	XLPE insulated	28.05 X 20.7
2	Core	
	Stranded Copper Conductor with round shape	13.87
	XLPE insulated	16.27
3	Polymeric Tape	46.83
4	PVC Outer Sheathing	51.6