

## TECHNICAL DATA SHEET LOW VOLTAGE POWER CABLE

Cable Description:

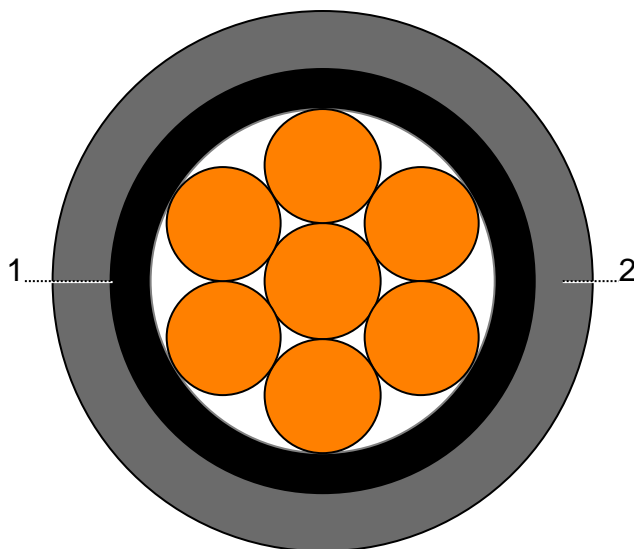
Cu / XLPE / PVC 1kV 1X35 mm<sup>2</sup> RM  
IEC 60502-1 FR-IEC 60332-1

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 Conductors x Cross-Section	mm <sup>2</sup>	1 x 35
Conductor Material & Shape		Copper & Stranded Class 2 non-compacted Round Shape
Insulation Material		XLPE
Conductor Nominal Insulation Thickness	mm	0.90
Insulation Color		BLACK
Outer Sheath Material		PVC - ST2
Colour of Outer Sheath		BLACK
Approximate Cable Overall Diameter	mm	11.7
Electrical Data:		
Max Conductor DC resistance @ 20 °C	ohms/km	0.5240
Max Conductor AC resistance @ 90 °C Two Cables	ohms/km	0.6686
Max Conductor AC resistance @ 90 °C Three Cables/Trefoil Formation	ohms/km	0.6687
Max Conductor Short Circuit Current @ 1 Second	kA	5.00
Current Carry Capacity		
Laid in air @ 40 °C Ambient Temperature		
Free In Flat Shape	A	178
Free In Trefoil Shape	A	143
In Pipes	A	112
Laid in Ground		
Direct Laid In Flat Shape	A	172
Direct Laid In Trefoil Shape	A	165
Laid In Duct	A	127
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	1.75
Maximum side wall pressure	kN/m	18.6
Minimum Bending Radius	mm	94
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	0.9 x 0.71
Gross Weight (Approximate without Lagging)	kg	420

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

**Cable Marking:**

BAHRA CABLES CO. KSA 1 X 35 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 1X35 mm <sup>2</sup> RM	Approx. Diameter
1	Core	
	Stranded Copper Conductor with round shape	7.38
	XLPE insulated	9.18
2	PVC Outer Sheathing	11.69