



SPECIAL APPLICATIONS

# Cable for Frequency Converter 1 kV



## Application

The Conduspar Line of Cables for Frequency Converter 1 kV is the ideal solution for connection and control of machines by frequency converters. This cable contains in its structure all the necessary components of the circuit: three phases, neutral conductor in concentric formation, with reduced section and the metallic shielding, to prevent the proliferation of noises in the adjacent circuits.

## Construction

**Conductor:** bare electrolytic copper wires, soft hardness, stringing of class 5, acc. to NM 280.

**Insulation:** thermosetting compound of HEPR - ethylene propylene rubber.

**Conductor colors:** black, blue, white and red - in increasing order of conductor quantity.

**Concentric conductor:** with electrolytic copper wires applied helicoidally, with section reduced by 50% from phase conductor, for sections greater than 16 mm<sup>2</sup>.

**Metallic shielding:** bare copper tape, with minimal overlap of 10%.

**Coverage and fillings:** thermoplastic compound of PVC/ST2.

## Maximum Operating Temperatures

In continuous regime: 90°C

In overload: 130°C

In short circuit: 250°C

## Reference Standards

ABNT NBR 7286 - Power cables with extruded insulation of ethylene propylene rubber (EPR) for voltages from 1 to 35 kV - Performance requirements.

ABNT NBR 6251 - Power cables with extruded insulation for voltages from 1 to 35 kV - Construction requirements.

ABNT NBR NM 280 - Conductors of insulated cables (IEC 60228, MOD).

## Conditioning

In reels.

## Nominal Dimensions

Formation	Diameter Conductor Phase (mm)	Insulation		Coverage		Nominal Weight
		Thickness (mm)	Diameter (mm)	Thickness (mm)	Diameter (mm)	(kg/km)
3x2,5+2,5	1,96	0,7	4,8	1,4	13,2	253
3x4+4	2,48	0,7	5,3	1,4	14,5	327
3x6+6	3,03	0,7	5,8	1,4	16,0	430
3x10+10	3,99	0,7	6,8	1,4	18,5	615
3x16+16	5,01	0,7	7,9	1,4	21,0	853
3x25+16	6,19	0,9	9,3	1,4	24,4	161
3x35+16	7,37	0,9	10,5	1,5	27,2	492
3x50+25	8,86	1,0	12,1	1,6	31,6	086
3x70+35	10,60	1,1	14,0	1,8	37,1	884
3x95+50	12,15	1,1	15,6	1,9	41,3	728
3x120+70	13,95	1,2	17,5	2,0	46,9	782
3x150+70	16,10	1,4	19,9	2,2	53,5	070
3x185+95	17,20	1,6	21,2	2,4	57,2	088
3x240+120	20,20	1,7	24,4	2,8	4	295