DATA SHEET

Low Voltage 4 Core Zerotox Bells 1kV Unarmoured

CBi electric african cables a Reunert company

Description: 4 Core Cu XLPE NHLSFR (Zerotox), 1000 V F6CC 4nnn ZZ 003 0K0S (White Stripe)

Specification: SANS 1507

Last updated: January 2026

PHYSICAL	… naaa …	4915	4925	4004	4006	4010	4016#
Conductor size	mm² nom	1,5	2,5	4	6	10	16
Conductor diameter	mm app	1,6	2,0	2,6	3,1	3,9	4,5
Insulation diameter	mm app	3,0	3,4	4,0	4,5	5,3	5,9
Layup diameter	mm app	7,3	8,3	9,6	10,9	12,9	13,6
Armour diameter	mm app	-	-	-	-	-	-
Cable diameter	mm app	10,7	11,7	13,1	14,8	16,8	17,5
Length of cable on a drum	m	500	500	500	500	500	500
Cable mass (approximate)	kg/m app	0,2	0,2	0,3	0,4	0,6	0,8
Gross mass on drum	kg app	105	130	168	221	319	429
Bending radius	mm min	86	94	104	118	134	140
ELECTRICAL							
DC Resistance @ 20 °C	Ω/km	12,100	7,410	4,610	3,080	1,830	1,150
AC Resistance @ 90 °C	Ω/km	15,429	9,449	5,878	3,927	2,334	1,467
Reactance X+	Ω/km	0,069	0,065	0,065	0,065	0,065	0,057
Impedance Z+	Ω/km	15,429	9,449	5,879	3,928	2,334	1,468
Capacitance C+	µF/km	0,098	0,108	0,118	0,127	0,139	0,161
Resistance Ro	Ω/km	61,715	37,794	23,513	15,709	9,334	5,866
Reactance Xo	Ω/km	N/A	N/A	N/A	N/A	N/A	N/A
CURRENT RATINGS							
Ground	Amps	30	39	51	64	85	113
Ducts in ground	Amps	24	31	41	51	68	89
Air in Shade	Amps	24	32	43	55	75	101
Air in sunlight	Amps	22	29	38	49	66	89
SHORT CIRCUIT RATING							
Symmetrical (250 ºC)	kA (1 sec)	0,2	0,4	0,6	0,9	1,4	2,3
Earth fault (150 ºC)	kA (1 sec)	0,0	0,0	0,0	0,0	0,0	0,0
Three Phase Volt drop	mV/A/m	26,7	16,4	10,2	6,8	4,0	2,5

* In practice the earth fault rating must be limited to symmetrical fault rating.
 # Shaped Conductors

The current ratings above are based on standard laying conditions for a single circuit in isolation as follows:
Conductor temperature = 90 °C
Soil thermal resistivity = 1,2 K·m/W
Soil temperature = 25 °C
Air temperature = 30 °C
Depth of burial = 500 mm
5% tolerance on dimensions

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