

# Low Voltage 2 Core Zerotox Bells Cables

## 1kV Armoured ECC

**Description:** 2 Core Cu XLPE NHL SFR SWA ECC NHL SFR (Zerotox), 1000 V  
**Specification:** SANS 1507

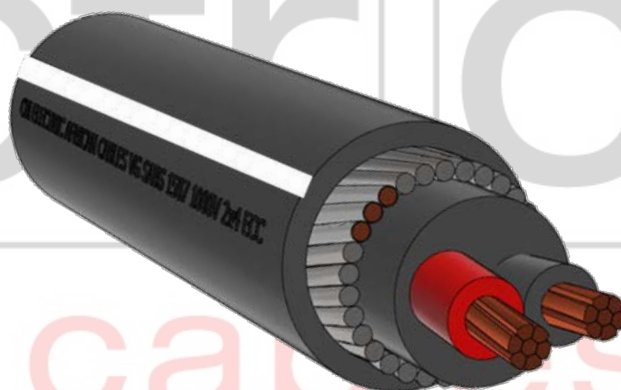
**F6CC 2nnn ZZ 323 0K0S (White Stripe)**  
*Last updated: January 2026*

PHYSICAL	... 2nnn ...	2915	2925	2004	2006	2010	2016
Conductor size	mm <sup>2</sup> nom	1,5	2,5	4	6	10	16
Conductor diameter	mm app	1,6	2,0	2,6	3,1	3,9	4,8
Insulation diameter	mm app	3,0	3,4	4,0	4,5	5,3	6,2
Bedding diameter	mm app	7,8	8,6	9,7	10,8	12,4	14,3
Armour diameter	mm app	9,6	10,4	11,5	12,6	14,2	16,1
Cable diameter	mm app	12,6	13,7	14,8	15,8	17,5	19,5
Length of cable on a drum	m	500	500	500	500	500	500
Cable mass (approximate)	kg/m app	0,3	0,3	0,4	0,5	0,6	0,8
Gross mass on drum	kg app	166	190	222	256	327	433
Bending radius	mm min	126	137	148	158	175	195
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	0,065
Impedance Z+	Ω/km	15,429	9,449	5,879	3,928	2,334	1,468
Capacitance C+	µF/km	0,153	0,170	0,191	0,209	0,234	0,260
Resistance Ro	Ω/km	35,323	25,722	19,252	13,429	9,544	6,271
Reactance Xo	Ω/km	0,394	0,356	0,335	0,314	0,298	0,281
CURRENT RATINGS							
Ground	Amps	34	45	59	74	99	127
Ducts in ground	Amps	28	37	48	60	80	104
Air in Shade	Amps	29	39	51	65	88	116
Air in sunlight	Amps	26	34	45	57	77	102
SHORT CIRCUIT RATING							
Symmetrical (250 °C)	kA (1 sec)	0,2	0,4	0,6	0,9	1,4	2,3
Earth fault (150 °C)	kA (1 sec)	0,4*	0,4*	0,5	0,7	1,0	1,5
Single Phase Volt drop	mV/A/m	30,9	18,9	11,8	7,9	4,7	2,9

\* In practice the earth fault rating must be limited to symmetrical fault rating.

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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