

# Low Voltage XLPE Control Cables

**Description:** 7 Core Cu XLPE FRPVC SWA ECC FRPVC, 1000 V  
7 Core Cu XLPE LHFRPVC SWA ECC LHFRPVC, 1000 V

**F2CC 7nnn ZZ 121 0K0S**  
**F2CC 7nnn ZZ 222 0K0S**

**Specification: SANS 1507**

*Last updated: January 2026*

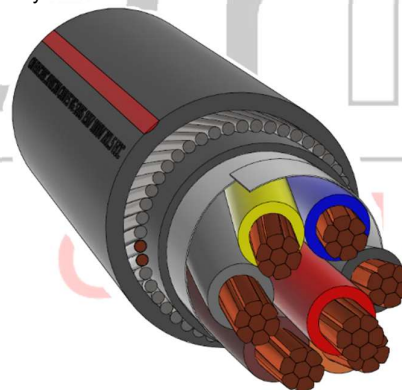
PHYSICAL	...7nnn	7915	7925	7004	7006	70010
Conductor size	mm <sup>2</sup> nom	1,5	2,5	4	6	10
Conductor diameter	mm app	1,6	2,1	2,6	3,1	3,9
Insulation diameter	mm app	3,0	3,5	4,0	4,6	5,3
Bedding diameter	mm app	12,1	13,5	15,1	16,8	19,0
Armour diameter	mm app	14,6	16,0	17,6	19,3	21,5
Cable diameter	mm app	18,0	19,5	21,0	22,7	25,2
Length of cable on a drum	m	500	500	500	500	500
Cable mass (approximate)	kg/m app	0,6	0,8	0,9	1,1	1,5
Gross mass on drum	kg app	367	425	502	599	809
Bending radius	mm min	180	195	210	227	252
ELECTRICAL						
DC Resistance @ 20 °C	Ω/km	12,100	7,410	4,610	3,080	1,830
AC Resistance @ 90 °C	Ω/km	15,429	9,448	5,878	3,927	2,333
Reactance X+	Ω/km	0,092	0,080	0,074	0,070	0,066
Impedance Z+	Ω/km	15,429	9,449	5,879	3,928	2,334
CURRENT RATINGS						
Ground	Amps	21	28	36	45	60
110 Ducts in ground	Amps	17	23	29	36	48
Air in Shade	Amps	19	26	34	43	58
Air in sunlight	Amps	17	22	30	37	51
SHORT CIRCUIT RATING						
Symmetrical (250 °C)	kA (1 sec)	0,15	0,25	0,40	0,60	1,00
Earth fault (200 °C)	kA (1 sec)	1,76	1,92	2,08	2,24	2,46
(Three Phase) Volt Drop	mV/A/m	26,7	16,4	10,2	6,8	4,0

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

Note ratings assume that all conductors carry equal currents simultaneously

**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



**DISCLAIMER:** CBI reserves the right to change product specifications from time to time to effect improvements and /or enhancements and accepts no liability arising from any difference between the published parameters of this data sheet and the finished product, unless by prior written agreement,

**POWER BY INNOVATION... INNOVATION THROUGH PARTNERSHIPS**

CBI-electric: african cables | a division of ATC (Pty) Ltd | Registration No. 1955/003773/07  
PO Box 172, Vereeniging 1930 | Steel Road, Peacehaven, Vereeniging, 1939, South Africa  
Tel: +27 16 430 6000 | [www.cbi-electric.com](http://www.cbi-electric.com) | Member of the REUNERT Group | B-BBEE Level 1  
ISO 9001 | ISO 14001 | ISO 45001