

# Low Voltage 3 Core Zerotox Bells Cables Armoured with ECC

**Cable Code** F6CC 3nnn ZZ 323 0K0S

**Description** 3 Core Cu XLPE PVC SWA ECC PVC, 1000 V

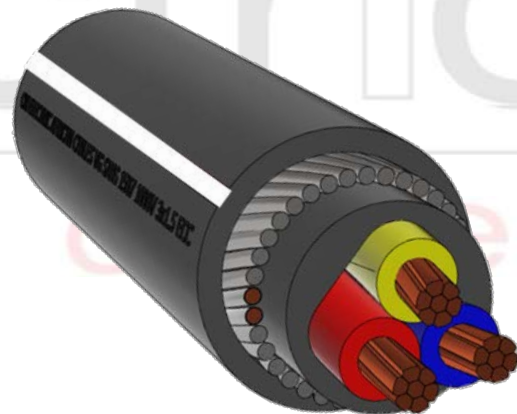
**Specification** SANS 1507

*Last updated: May 2025*

PHYSICAL	... 3nnn ...	3915	3925	3004	3006	3010	3016
Conductor size	mm <sup>2</sup> nom	1.5	2.5	4	6	10	16
Conductor diameter	mm app	1.6	2.1	2.6	3.1	3.9	3.9
Insulation diameter	mm app	3.0	3.5	4.0	4.6	5.3	5.3
Bedding diameter	mm app	8.3	9.3	10.4	11.7	13.3	13.3
Armour diameter	mm app	10.1	11.1	12.2	13.5	15.1	15.1
Cable diameter	mm app	13.3	14.3	15.4	16.7	18.5	18.5
Length of cable on a drum	m	500	500	500	500	500	500
Cable mass (approximate)	kg/m app	0.3	0.4	0.5	0.6	0.7	0.9
Gross mass on drum	kg app	184	216	252	306	410	494
Bending radius	mm min	133	143	154	167	185	185
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	0.048
Impedance Z+	Ω/km	15.429	9.449	5.879	3.928	2.334	1.467
Capacitance C+	µF/km	0.166	0.187	0.207	0.228	0.253	0.372
Resistance Ro	Ω/km	34.89	24.88	18.865	13.139	9.377	6.460
Reactance Xo	Ω/km	0.405	0.370	0.346	0.328	0.310	0.302
CURRENT RATINGS							
Ground	Amps	29	39	50	63	84	109
Ducts in ground	Amps	24	31	41	51	67	88
Air in Shade	Amps	25	33	44	56	75	99
Air in sunlight	Amps	22	30	39	49	66	87
SHORT CIRCUIT RATING							
Symmetrical (250 °C)	kA (1 sec)	0.2	0.4	0.6	0.9	1.4	2.3
Earth fault (200 °C)	kA (1 sec)	0.4*	0.5*	0.5	0.8	1.0	1.4

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

**The ratings above are based on standard laying conditions for a single circuit in isolation, with the following parameters:**  
 Conductor temperature = 90 °C  
 Soil thermal resistivity = 1.2 Km/W  
 Soil temperature = 25 °C  
 Air temperature = 30 °C  
 Depth of burial = 500 mm  
 Single circuit in isolation  
 5% tolerance on dimensions



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