

Low Voltage 3 Core LV XLPE Cables

Not armoured

Cable Code F2CC 3nnn ZZ 001 0K0S

Description 3 Core Cu XLPE PVC PVC, 1000 V

Specification SANS 1507

Last updated: May 2025

PHYSICAL		... naaa ...	3915	3925	3004	3006	3010	3016*
Conductor size	mm ² 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		-	-	-	-	-	-
Armour diameter	mm app		6.5	7.6	8.7	9.9	11.5	11.5
Cable diameter	mm app		10.0	11.0	12.1	13.4	15.4	15.4
Length of cable on a drum	m		500	500	500	500	500	500
Cable mass (approximate)	kg/m app		0.1	0.1	0.2	0.3	0.4	0.6
Gross mass on drum	kg app		69	94	120	153	222	305
Bending radius	mm min		80	88	97	107	123	123
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		0.167	0.188	0.209	0.229	0.253	0.265
Resistance Ro	Ω/km		61.71	37.79	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	63	84	110
Ducts in ground	Amps		24	31	40	50	67	87
Air in Shade	Amps		24	32	42	53	73	95
Air in sunlight	Amps		21	28	37	48	65	84
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)		0.0	0.0	0.0	0.0	0.0	0.0

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

