

Low Voltage 3 Core PVC Cables Armoured

Cable Code F4DC 3nnn ZZ 111 0K0S

Description 3 Core Cu PVC PVC SWA PVC, 3300 V

Specification SANS 1507

Last updated: May 2025

PHYSICAL	... naaa ...	3010	3016*
Conductor size	mm ² nom	10	16*
Conductor diameter	mm app	3,9	3,9
Insulation diameter	mm app	8,6	8,6
Bedding diameter	mm app	20,2	20,2
Armour diameter	mm app	22,0	22,0
Cable diameter	mm app	25,7	25,7
Length of cable on a drum	m	500	500
Cable mass (approximate)	kg/m app	1,3	1,5
Gross mass on drum	kg app	681	803
Bending radius	mm min	257	257
ELECTRICAL			
DC Resistance @ 20 °C	Ω/km	1,830	1,150
AC Resistance @ 70 °C	Ω/km	2,190	1,376
Reactance X+	Ω/km	0,065	0,048
Impedance Z+	Ω/km	2,191	1,377
Capacitance C+	µF/km	0,537	0,660
Resistance Ro	Ω/km	14,41	13,80
Reactance Xo	Ω/km	0,385	0,377
CURRENT RATINGS			
Ground	Amps	70	92
Ducts in ground	Amps	57	75
Air in Shade	Amps	63	84
Air in sunlight	Amps	49	65
SHORT CIRCUIT RATING			
Symmetrical (160 °C)	kA (1 sec)	1,2	1,8
Earth fault (160 °C)	kA (1 sec)	2,1*	2,0*

* 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 = 70 °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

