

Low Voltage Mains 4 Core PVC Cables

3,3kV Cu Armoured

Description 4 Core Cu PVC FRPVC SWA FRPVC, 3300 V

F4DC 4nnn ZZ 111 0K0S

Description 4 Core Cu PVC LHFRPVC SWA LHFRPVC, 3300 V

F4DC 4nnn ZZ 212 0K0S

Specification SANS 1507

Last updated: December 2025

PHYSICAL	... naaa ...	4025	4035	4050	4070	4095	4120	4150	4185	4240	4300	4400
Conductor size	mm ² nom	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter	mm app	5,7	6,7	7,8	9,4	11,1	12,5	13,7	15,5	17,7	20,0	22,5
Insulation diameter	mm app	10,4	11,4	12,4	14,1	15,7	17,1	18,3	20,2	22,4	25,0	28,0
Bedding diameter	mm app	24,1	26,4	28,8	33,0	36,8	40,0	42,7	47,0	52,0	58,1	65,0
Armour diameter	mm app	30,8	33,5	35,9	40,1	45,4	48,6	51,3	55,5	60,6	66,7	74,9
Cable diameter	mm app	35,1	37,9	40,7	45,3	50,5	53,8	56,9	61,6	67,1	73,2	81,4
Length of cable on a drum	m	300	300	300	300	300	300	300	300	300	300	300
Cable mass (approximate)	kg/m app	2,9	3,5	4,1	5,3	7,0	8,2	9,5	11,3	14,0	16,9	21,6
Gross mass on drum	kg app	971	1146	1423	1760	2441	2711	3193	3723	4602	5581	7076
Bending radius	mm min	351	379	407	453	505	538	569	616	671	732	814

ELECTRICAL												
DC Resistance @ 20 °C	Ω/km	0,727	0,524	0,387	0,268	0,193	0,153	0,124	0,099	0,075	0,060	0,047
AC Resistance @ 70 °C	Ω/km	0,870	0,627	0,463	0,321	0,232	0,184	0,150	0,121	0,093	0,075	0,060
Reactance X+	Ω/km	0,058	0,059	0,056	0,055	0,055	0,055	0,055	0,055	0,056	0,056	0,054
Impedance Z+	Ω/km	0,872	0,630	0,467	0,326	0,238	0,192	0,160	0,133	0,108	0,093	0,081
Capacitance C+	µF/km	0,646	0,692	0,760	0,842	0,915	1,003	1,082	1,214	1,392	1,520	1,690
Resistance Ro	Ω/km	5,61	4,95	4,530	3,935	2,864	2,670	2,461	2,282	2,062	1,854	1,366
Reactance Xo	Ω/km	0,373	0,360	0,344	0,328	0,320	0,310	0,304	0,298	0,288	0,285	0,281

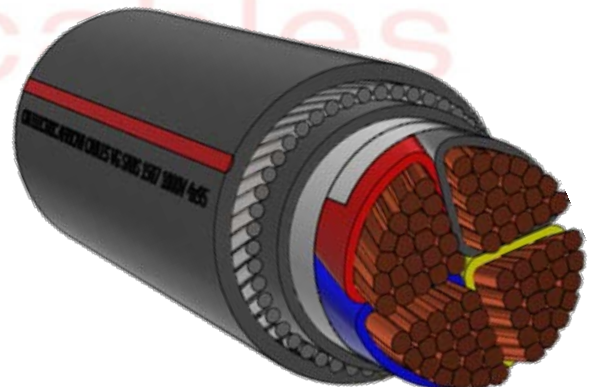
CURRENT RATINGS												
Ground	Amps	121	146	172	210	253	288	323	365	421	473	529
Ducts in ground	Amps	99	119	141	172	207	235	263	297	342	384	427
Air in Shade	Amps	117	142	170	212	261	302	342	394	463	531	609
Air in sunlight	Amps	89	108	129	159	195	225	254	291	340	388	443

SHORT CIRCUIT RATING												
Symmetrical (160 °C)	kA (1 sec)	2,9	4,0	5,8	8,1	10,9	13,8	17,3	21,3	27,6	34,5	46,0
Earth fault (160 °C)	kA (1 sec)	5,9*	6,5*	6,9*	7,7	10,9	11,5	12,4	13,2	14,5	16,0	22,6
Three Phase Volt Drop	mV/A/m	1,51	1,09	0,81	0,56	0,41	0,33	0,28	0,23	0,19	0,16	0,14

* 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 resistance = 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



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