

Low Voltage Mains 4 Core PVC Cables 3,3kV Cu Armoured ECC

Description 3 Core Cu PVC FRPVC SWA ECC FRPVC, 3300 V

F4DC 3nnn ZZ 121 0K0S

Description 3 Core Cu PVC LHFRPVC SWA ECC LHFRPVC, 3300 V

F4DC 3nnn ZZ 222 0K0S

Specification SANS 1507

Last updated: December 2025

PHYSICAL	... naaa ...	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300	3400
Conductor size	mm ² nom	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter	mm app	5,0	5,9	6,9	8,9	9,8	11,0	12,2	13,7	15,7	17,5	19,8
Insulation diameter	mm app	9,7	10,6	11,5	13,6	14,4	15,6	16,9	18,3	20,3	22,5	25,3
Bedding diameter	mm app	23,8	25,7	27,7	32,5	34,3	36,9	40,0	43,0	47,2	51,9	57,8
Armour diameter	mm app	27,8	29,7	31,7	36,5	38,3	40,9	45,0	48,0	52,2	56,9	62,8
Cable diameter	mm app	31,7	33,6	36,1	41,3	43,1	46,0	50,1	53,2	57,9	63,0	69,3
Length of cable on a drum	m	300	300	300	300	300	300	300	300	300	300	300
Cable mass (approximate)	kg/m app	2,4	2,8	3,3	4,3	5,2	6,1	7,6	8,9	11,0	13,2	16,3
Gross mass on drum	kg app	795	947	1101	1482	1746	2087	2610	2967	3621	4373	5384
Bending radius	mm min	317	336	361	413	431	460	501	532	579	630	693

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	0,050	0,050	0,048	0,052	0,047	0,046	0,047	0,047	0,048	0,047	0,046
Impedance Z+	Ω/km	0,871	0,629	0,466	0,325	0,237	0,190	0,157	0,130	0,104	0,089	0,076
Capacitance C+	µF/km	0,709	0,796	0,889	1,062	1,147	1,282	1,365	1,549	1,864	2,068	2,474
Resistance Ro	Ω/km	3,23	2,91	2,047	1,568	1,233	0,935	0,843	0,668	0,544	0,448	0,364
Reactance Xo	Ω/km	0,369	0,352	0,335	0,317	0,304	0,294	0,291	0,283	0,274	0,271	0,264

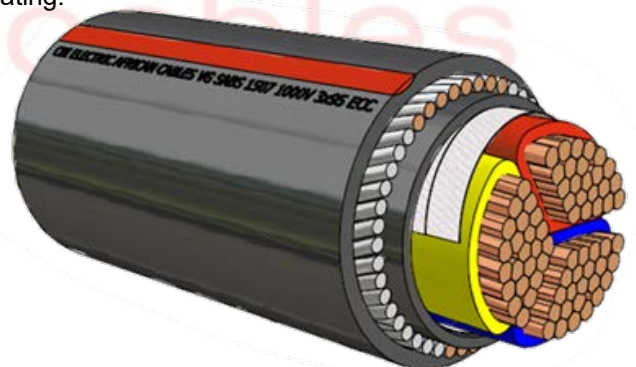
CURRENT RATINGS												
Ground	Amps	117	141	166	205	244	275	308	345	394	436	486
Ducts in ground	Amps	96	115	136	168	199	224	251	281	320	354	393
Air in Shade	Amps	110	134	161	203	244	280	319	363	422	476	542
Air in sunlight	Amps	84	102	122	154	184	210	238	270	313	351	397

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)	3,4*	3,5	5,0	6,3	7,9	10,5	11,4	14,4	17,4	21,0	25,8
Three Phase Volt Drop	mV/A/m	1,51	1,09	0,81	0,56	0,41	0,33	0,27	0,22	0,18	0,15	0,13

* 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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