

Low Voltage Mains 3 Core PVC Cables

3,3kV Cu Armoured

Description 3 Core Cu PVC FRPVC SWA FRPVC, 3300 V

F4DC 3nnn ZZ 111 0K0S

Description 3 Core Cu PVC LHFRPVC SWA LHFRPVC, 3300 V

F4DC 3nnn ZZ 212 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	7,5	8,8	10,8	13,1	16,1
Gross mass on drum	kg app	790	942	1091	1469	1729	2064	2586	2934	3581	4323	5321
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	6,09	5,47	5,088	4,296	3,982	3,739	2,841	2,608	2,366	2,164	1,965
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

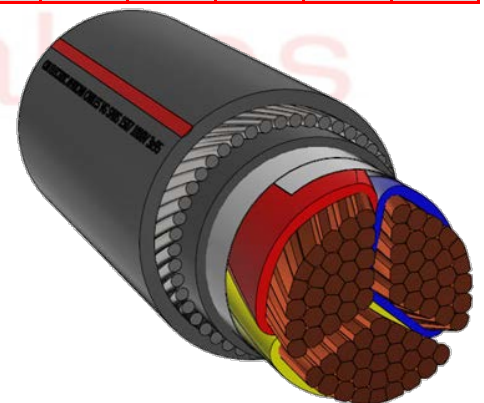
CURRENT RATINGS												
Ground	Amps	117	141	167	206	246	280	314	355	410	459	517
Ducts in ground	Amps	96	115	136	169	201	228	257	290	334	374	420
Air in Shade	Amps	110	134	161	205	246	284	324	372	438	499	572
Air in sunlight	Amps	84	102	122	154	185	213	242	277	324	368	420

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)	5,4*	5,8*	6,1*	7,0	7,5	7,9	10,7	11,5	12,6	13,7	15,0
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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