

Low Voltage Mains 4 Core PVC Cables

1kV Cu Armoured

Description 4 Core Cu PVC FRPVC SWA FRPVC, 1000 V

F4CC 4nnn ZZ 111 0K0S

Description 4 Core Cu PVC LHFRPVC SWA LHFRPVC, 1000 V

F4CC 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	8,2	9,2	10,7	12,3	14,4	15,8	17,5	19,7	22,4	25,0	28,0
Bedding diameter	mm app	19,2	21,5	24,9	28,6	33,8	37,0	40,7	46,0	52,0	58,1	65,0
Armour diameter	mm app	24,3	28,1	31,5	35,8	40,9	45,6	49,3	54,6	60,6	66,7	74,9
Cable diameter	mm app	28,0	32,0	35,8	40,5	46,1	50,8	54,5	60,2	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	2,0	2,9	3,6	4,7	6,1	7,7	9,1	11,1	14,0	16,9	21,6
Gross mass on drum	kg app	648	960	1184	1588	2082	2661	3035	3654	4602	5581	7076
Bending radius	mm min	280	320	358	405	461	508	545	602	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	0,464	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	0,816	0,914	0,957	1,057	1,093	1,154	1,189	1,276	1,392	1,520	1,690
Resistance Ro	Ω/km	9,48	6,00	5,184	4,456	3,821	2,845	2,605	2,324	2,062	1,854	1,366
Reactance Xo	Ω/km	0,332	0,325	0,318	0,306	0,302	0,298	0,296	0,294	0,288	0,285	0,281

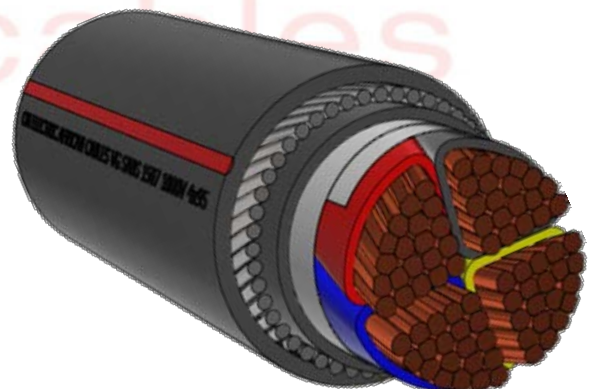
CURRENT RATINGS												
Ground	Amps	121	147	174	213	254	289	324	366	421	473	529
Ducts in ground	Amps	98	119	141	173	206	235	264	298	342	384	427
Air in Shade	Amps	112	140	169	212	259	301	343	395	463	531	609
Air in sunlight	Amps	87	107	129	161	194	225	255	292	340	388	443

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)	3,0*	5,2*	5,9*	6,7	7,7	10,7	11,6	13,0	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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