

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

Description 4 Core Al PVC FRPVC SWA ECC FRPVC, 3300 V

F4DA 4nnn ZZ 121 0K0S

Description 4 Core Al PVC LHFRPVC SWA ECC LHFRPVC, 3300 V

F4DA 4nnn ZZ 222 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	2,3	2,6	3,0	3,6	4,7	5,2	5,9	6,7	7,9	9,3	11,8
Gross mass on drum	kg app	785	886	1073	1256	1619	1786	1980	2266	2772	3177	4016
Bending radius	mm min	351	379	407	453	505	538	569	616	671	732	814

ELECTRICAL												
DC Resistance @ 20 °C	Ω/km	1,200	0,868	0,641	0,443	0,320	0,253	0,206	0,164	0,125	0,100	0,078
AC Resistance @ 70 °C	Ω/km	1,442	1,043	0,770	0,533	0,385	0,305	0,248	0,198	0,151	0,122	0,095
Reactance X+	Ω/km	0,054	0,057	0,056	0,056	0,055	0,053	0,056	0,057	0,056	0,056	0,054
Impedance Z+	Ω/km	1,443	1,045	0,772	0,536	0,389	0,309	0,254	0,206	0,161	0,134	0,110
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	4,74	4,14	2,875	1,985	1,436	1,333	1,122	0,853	0,789	0,628	0,485
Reactance Xo	Ω/km	0,369	0,359	0,344	0,329	0,320	0,309	0,302	0,298	0,288	0,286	0,281

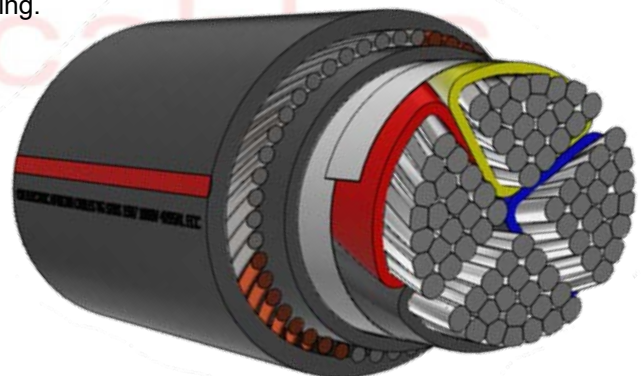
CURRENT RATINGS												
Ground	Amps	94	113	134	163	196	224	250	282	326	365	414
Ducts in ground	Amps	77	92	109	133	160	183	204	230	265	296	335
Air in Shade	Amps	91	110	132	165	202	235	265	305	359	411	478
Air in sunlight	Amps	69	83	100	124	151	174	196	225	264	300	348

SHORT CIRCUIT RATING												
Symmetrical (160 °C)	kA (1 sec)	1,9	2,7	3,8	5,3	7,2	9,1	11,4	14,1	18,2	22,8	30,4
Earth fault (160 °C)	kA (1 sec)	2,4*	2,6	3,7	5,4*	7,5*	7,6	9,0	12,0	12,3	15,4	20,1
Three Phase Volt Drop	mV/A/m	2,50	1,81	1,34	0,93	0,67	0,54	0,44	0,36	0,28	0,23	0,19

* 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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