

Low Voltage Mains 4 Core XLPE Cables

3,3kV Al Unarmoured

Description 4 Core Al XLPE FRPVC, 3300 V

F2DA 4nnn ZZ 001 0K0S

Description 4 Core Al XLPE LHFRPVC 3300 V

F2DA 4nnn ZZ 002 0K0S

Specification SANS 1507

Last updated: December 2025

PHYSICAL	...4nnn...	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	9,9	10,9	12,0	13,6	15,3	16,7	17,9	19,7	21,9	24,2	26,7
Layup diameter	mm app	23,1	25,4	27,8	32,0	35,8	39,0	41,7	46,0	51,0	56,2	62,0
Armour diameter	mm app	-	-	-	-	-	-	-	-	-	-	-
Cable diameter	mm app	27,4	29,7	32,1	36,8	40,5	43,7	46,9	51,6	57,1	62,7	69,4
Length of cable on a drum	m	300	300	300	300	300	300	300	300	300	300	300
Cable mass (approximate)	kg/m app	0,8	0,9	1,1	1,5	1,8	2,2	2,6	3,1	4,0	4,8	6,0
Gross mass on drum	kg app	282	329	409	544	655	836	958	1149	1420	1709	2201
Bending radius	mm min	220	238	257	294	324	350	375	413	457	501	555

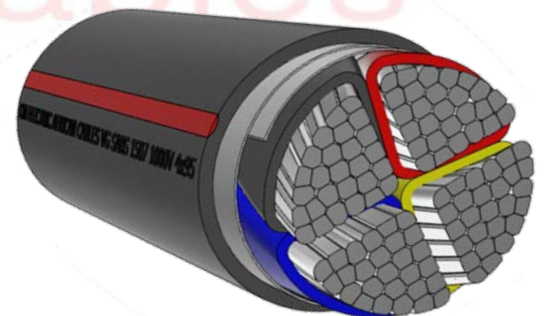
ELECTRICAL												
DC Resistance @ 20 °C	Ω/km	1,200	0,868	0,641	0,443	0,320	0,253	0,206	0,164	0,125	0,100	0,078
AC Resistance @ 90 °C	Ω/km	1,539	1,113	0,822	0,568	0,411	0,325	0,265	0,211	0,161	0,130	0,102
Reactance X+	Ω/km	0,054	0,057	0,056	0,056	0,055	0,053	0,056	0,057	0,056	0,056	0,054
Impedance Z+	Ω/km	1,540	1,114	0,824	0,571	0,414	0,329	0,271	0,219	0,171	0,141	0,115
Capacitance C+	µF/km	0,098	0,108	0,117	0,131	0,145	0,156	0,165	0,179	0,195	0,211	0,228
Resistance Ro	Ω/km	6,15	4,45	3,288	2,273	1,643	1,300	1,059	0,845	0,646	0,519	0,407
Reactance Xo	Ω/km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

CURRENT RATINGS												
Ground	Amps	113	136	161	197	237	271	304	345	402	456	523
110mm Ducts in ground	Amps	91	110	130	160	192	220	247	281	328	372	426
Air in Shade	Amps	111	135	164	205	253	295	336	390	465	538	629
Air in sunlight	Amps	97	118	142	178	218	254	288	334	397	458	535

SHORT CIRCUIT RATING												
Symmetrical (250 °C)	kA (1 sec)	2,4	3,3	4,7	6,6	9,0	11,3	14,2	17,5	22,7	28,3	37,8
Earth fault (200 °C)	kA (1 sec)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Three Phase Volt Drop	mV/A/m	2,67	1,93	1,43	0,99	0,72	0,57	0,47	0,38	0,30	0,24	0,20

The ratings above are based on standard laying conditions for a single circuit in isolation, with the following parameters:

- Conductor temperature = 90 °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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