

# Low Voltage Mains 3 Core PVC Cables

## 3,3kV Al Unarmoured

Description 4 Core Al PVC FRPVC, 3300 V

F4DA 4nnn ZZ 001 0K0S

Description 4 Core Al PVC LHFRPVC, 3300 V

F4DA 4nnn ZZ 002 0K0S

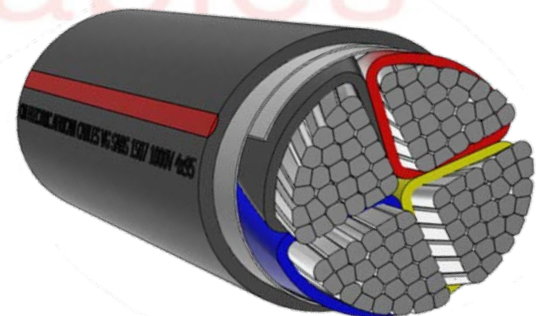
Specification SANS 1507

Last updated: December 2025

PHYSICAL	... naaa ...	4025	4035	4050	4070	4095	4120	4150	4185	4240	4300	4400
Conductor size	mm <sup>2</sup> 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
Layup 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	-	-	-	-	-	-	-	-	-	-	-
Cable diameter	mm app	28,4	30,7	33,1	37,7	41,5	44,7	47,9	52,6	58,1	64,7	72,4
Length of cable on a drum	m	300	300	300	300	300	300	300	300	300	300	300
Cable mass (approximate)	kg/m app	1,0	1,2	1,4	1,8	2,2	2,6	3,0	3,6	4,5	5,5	6,9
Gross mass on drum	kg app	346	424	517	635	836	950	1081	1297	1606	2067	2483
Bending radius	mm min	228	246	265	302	332	358	383	421	465	517	579
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	0,298	0,326	0,355	0,397	0,438	0,471	0,498	0,539	0,586	0,599	0,614
Resistance Ro	Ω/km	5,77	4,17	3,081	2,130	1,540	1,218	0,993	0,792	0,606	0,487	0,382
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	95	114	135	166	200	229	256	292	340	386	442
Ducts in ground	Amps	76	92	109	133	161	184	206	235	274	312	357
Air in Shade	Amps	88	108	130	163	201	234	267	310	369	428	501
Air in sunlight	Amps	68	83	100	124	152	176	200	231	274	316	367
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)	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	2,50	1,81	1,34	0,93	0,67	0,54	0,44	0,36	0,28	0,23	0,19

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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