

Medium Voltage Paper Insulated Lead Alloy Covered Cables (PILAC)

Description: 3 Core, Copper, PILAC F1FC...Primary Code

Bedding/Armouring/Sheathing: FRPVC/ SWA/ FRPVC (Red stripe) ...38 111 Finish Code
 LHFPRVC/ SWA/ LHFPRVC (Blue stripe) ...38 212

Specification: SANS 97, 11/11 kV , Table 18, Belted

Size code	...n/a...	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300
PHYSICAL DIMENSIONS											
Conductor nominal size	mm ² nom	25*	35*	50*	70	95	120	150	185	240	300
Conductor diameter/depth	mm app.	6,1	7,2	8,3	8,3	9,8	11,0	12,2	13,7	15,7	17,6
Insulation diameter/depth	mm app.	12,4	13,5	14,6	14,6	16,0	17,2	18,4	19,9	21,9	23,9
Diameter over lead sheath	mm app.	36,5	39,0	41,5	41,0	44,5	47,0	49,5	53,0	58,0	62,0
Bedding diameter	mm app.	39,0	41,5	44,5	44,0	47,5	50,5	53,0	56,5	62,0	66,0
Size of armour wires	mm app.	2,50	2,50	2,50	2,50	3,15	3,15	3,15	3,15	3,15	3,15
Cable diameter	mm app.	49,0	51,5	55,0	54,5	59,5	63,0	66,0	69,5	74,5	79,5
TECHNICAL DATA											
Normal drum length	m	500	500	300	300	300	300	300	300	300	300
Cable mass	kg/m	6,5	7,2	8,3	8,9	11,1	12,4	13,9	15,9	18,9	21,8
Gross mass	kg app.	3650	4000	2890	3070	3730	4065	4515	5185	6195	7205
Bending radius	mm min.	588	618	660	654	714	756	792	834	894	954
DC Resistance @ 20°C	Ω/km	0,727	0,524	0,387	0,268	0,193	0,153	0,124	0,0991	0,0754	0,060
AC Resistance @ 70°C	Ω/km	0,870	0,627	0,463	0,321	0,232	0,184	0,149	0,1200	0,0923	0,074
Reactance	Ω/km	0,110	0,105	0,101	0,082	0,077	0,075	0,073	0,070	0,068	0,066
Impedance	Ω/km	0,877	0,636	0,474	0,331	0,244	0,199	0,166	0,139	0,115	0,099
Zero Sequence											
Resistance	Ω/km	2,112	1,771	1,509	1,361	1,040	0,946	0,860	0,777	0,680	0,612
Reactance	Ω/km	0,150	0,143	0,136	0,139	0,132	0,127	0,123	0,118	0,113	0,109
Impedance	Ω/km	2,117	1,777	1,515	1,368	1,048	0,954	0,869	0,786	0,689	0,622
Current rating:											
In ground	Amps	105	125	150	180	220	250	280	320	370	420
In ducts	Amps	90	110	130	155	190	215	240	275	320	360
In air in shade	Amps	105	125	150	190	230	265	305	350	410	470
Short circuit ratings:											
Symmetrical (250°C)	kA.1s	3,7	5,1	6,9	9,9	13,8	17,4	21,5	26,9	35,3	44,3
Earth fault (200°C)	kA.1s	16,6	18,0	19,6	19,6	25,5	27,0	28,9	31,1	34,6	37,7

When ordering please quote: Primary + size code + finish code e.g,

F1FC 3025 38 111 0K0S Lead Alloy E

*Circular Conductors

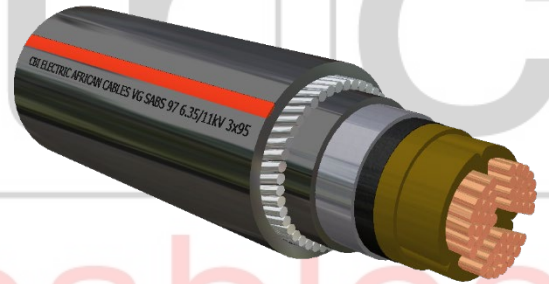
Soil thermal resistance = 1,2Km/W

Soil temperature = 25°C

Depth of burial = 800mm

Air temperature = 30°C

+5% tolerance on dimensions



african cables

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