

Medium Voltage Paper Insulated Lead Alloy Covered Cables (PILAC)

Copper 3 Core
11000/11000V
Table 18
SANS 97

PILAC	F1FC...	Primary group code
FRPVC SWA FRPVC (red stripe)	...38 111	Table + Finish code
LHPVC SWA LHPVC (blue stripe)	...38 212	
FRPVC SWA PE	...38 114	

Size code	...naaa...	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300
Conductor size	mm ² nom	25*	35*	50*	70	95	120	150	185	240	300
Conductor depth	mm app.	6,1	7,2	8,3	8,3	9,8	11,0	12,2	13,7	15,7	17,6
Insulated 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	2,50	2,50	2,50	2,50	3,15	3,15	3,15	3,15	3,15	3,15
Overall diameter	mm app.	49,0	51,5	55,0	54,5	59,5	63,0	66,0	69,5	74,5	79,5
Normal drum length	m	500	500	300	300	300	300	300	300	300	300
Cable mass	kg/m app.	6,5	7,2	8,3	8,9	11,1	12,4	13,9	15,9	18,9	21,8
Gross mass (drum length)	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
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	Amps	105	125	150	190	230	265	305	350	410	470
Positive sequence											
Resistance dc @ 20°C	Ω/km max	0,727	0,524	0,387	0,268	0,193	0,153	0,124	0,0991	0,0754	0,0601
ac @ 70°C	Ω/km	0,870	0,627	0,463	0,321	0,232	0,184	0,149	0,1200	0,0923	0,0747
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
Short circuit ratings											
Symmetrical	kA (1sec)	3,7	5,1	6,9	9,9	13,8	17,4	21,5	26,9	35,3	44,3
Earth fault(Symmetrical limit)	kA (1sec)	16,6	18,0	19,6	19,6	25,5	27,0	28,9	31,1	34,6	37,7

* Circular Conductor

When ordering please quote: primary + size + table + finish code

e.g. F1FC 3120 38 111 0K0S

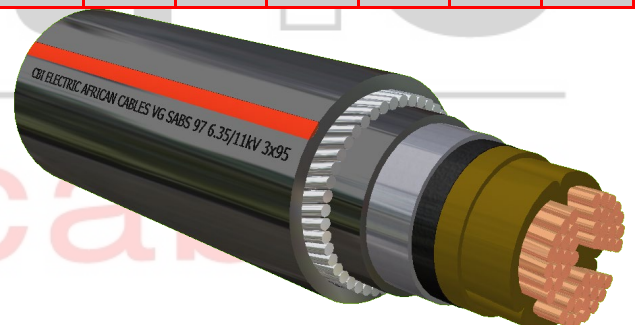
Soil thermal resistance = 1,2Km/W

Soil temperature = 25°C

Depth of burial = 800mm

Air temperature = 30°C

+5% tolerance on dimensions



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