

# Medium Voltage Paper Insulated Lead Alloy Covered Cables (PILAC)

Copper 3 Core  
11000/11000V  
Table 26  
SANS 97

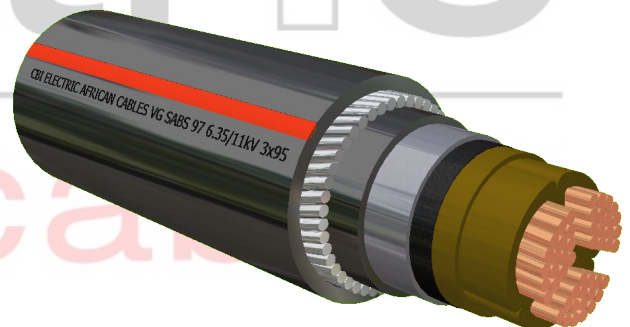
PILAC F1FC... Primary group code  
FRPVC SWA FRPVC (red stripe) ...46 111 Table + Finish code  
LHPVC SWA LHPVC (blue stripe) ...46 212

Size code	...naaa...	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300
Conductor size	mm <sup>2</sup> 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.	13,6	14,7	15,8	15,8	17,3	18,5	19,7	21,2	23,2	25,1
Diameter over lead sheath	mm app.	41,0	43,5	46,0	45,5	48,5	51,5	54,0	57,5	62,0	66,5
Bedding diameter	mm app.	44,0	46,5	49,0	49,0	52,0	55,0	58,5	62,0	66,5	71,0
Size of armour wires	mm	2,50	2,50	2,50	3,15	3,15	3,15	3,15	3,15	3,15	3,15
Overall diameter	mm app.	54,0	57,0	60,0	61,0	64,5	67,5	71,0	75,5	80,5	85,0
Normal drum length	m	500	500	300	300	300	300	300	300	300	300
Cable mass	kg/m app.	7,5	8,3	9,3	10,8	12,4	13,9	15,5	17,6	20,5	23,4
Gross mass (drum length)	kg app.	4180	4580	3220	3670	4150	4600	5080	5950	6820	7520
Bending radius	mm min.	648	684	720	732	774	810	852	906	966	1020
<b>Current rating</b>											
In ground	Amps	100	125	145	180	215	245	275	315	365	410
In ducts	Amps	89	110	130	155	185	215	240	270	315	355
In air	Amps	105	125	150	185	225	260	295	340	400	460
<b>Positive sequence</b>											
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	0,150	0,1201	0,0923	0,0746
Reactance	Ω/km	0,116	0,111	0,106	0,088	0,082	0,080	0,077	0,074	0,072	0,069
Impedance	Ω/km	0,878	0,637	0,475	0,333	0,246	0,200	0,168	0,141	0,116	0,101
<b>Zero sequence</b>											
Resistance	Ω/km	1,956	1,633	1,395	1,106	0,956	0,860	0,780	0,703	0,627	0,568
Reactance	Ω/km	0,160	0,153	0,147	0,150	0,142	0,137	0,132	0,127	0,122	0,117
Impedance	Ω/km	1,962	1,640	1,403	1,116	0,966	0,871	0,791	0,715	0,639	0,580
<b>Short circuit ratings</b>											
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)	18,9	20,3	21,9	26,2	28,4	30,3	32,4	34,9	37,9	41,0

\* Circular Conductor

When ordering please quote: primary + size + table + finish code  
e.g. F1FC 3120 46 111 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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