

Medium Voltage Paper Insulated Lead Alloy Covered Cables (PILAC)

PILAC
FRPVC DTA FRPVC (red stripe)
LHPVC DTA LHPVC (blue stripe)

F1FC... Primary group code
...38 191 Table + Finish code
...38 292

Copper 3 Core
11000/11000V
Table 18
SANS 97

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	57,5	62,0
Bedding diameter	mm app.	40,0	41,5	44,5	44,0	47,5	50,5	53,0	56,5	61,5	66,0
Thickness of DSTA	mm	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80
Overall diameter	mm app.	47,0	49,5	53,5	53,0	56,5	60,0	63,0	66,5	71,5	76,5
Normal drum length	m	500	500	300	300	300	300	300	300	300	300
Cable mass	kg/m app.	5,3	6,2	7,1	7,8	9,2	10,4	11,8	13,6	16,5	19,2
Gross mass (drum length)	kg app.	2890	3410	2313	2523	3160	3520	3885	4425	5375	6425
Bending radius	mm min.	564	594	642	636	678	720	756	798	858	918
Current rating											
In ground	Amps	105	125	150	180	220	250	280	320	370	415
In ducts	Amps	90	110	125	155	185	215	240	270	315	355
In air	Amps	105	125	150	185	230	265	300	345	405	465
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	0,120	0,0924	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	0,100
Capacitance	μF/km	0,355	0,397	0,442	0,441	0,497	0,545	0,592	0,650	0,728	0,804
Zero sequence											
Resistance	Ω/km	4,805	4,076	3,497	3,236	2,785	2,591	2,307	2,040	1,703	1,507
Reactance	Ω/km	0,151	0,144	0,136	0,139	0,132	0,127	0,123	0,118	0,113	0,109
Impedance	Ω/km	4,807	4,079	3,500	3,239	2,788	2,594	2,310	2,043	1,707	1,511
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)	4,4	5,0	5,7	6,0	6,8	7,2	8,1	9,0	10,8	12,1

* Circular Conductor

When ordering please quote: primary + size + table + finish code
e.g. F1FC 3120 38 191 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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