

Medium Voltage Paper Insulated Lead Alloy Covered Cables (PILAC)

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

F1EC...
...35 111
...35 212

Primary group code
Table + Finish code

Copper 3 Core
3800/6600V
Table 15
SANS 97

Size code	...naaa...	3016	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300
Conductor size	mm ² nom	16*	25*	35*	50*	70	95	120	150	185	240	300
Conductor depth	mm nom	5,2	6,1	7,2	8,3	8,3	9,8	11,0	12,2	13,7	15,7	17,6
Insulated depth	mm nom	9,2	10,1	11,2	12,3	12,3	13,8	15,0	16,2	17,7	19,7	21,6
Diameter over lead sheath	mm nom	25,0	27,0	29,5	32,0	31,5	35,0	37,5	40,5	44,0	48,5	53,0
Bedding diameter	mm nom	27,0	29,5	32,0	34,5	34,0	38,0	40,5	43,5	47,5	52,0	56,5
Diameter of SWA	mm	2,00	2,00	2,00	2,50	2,50	2,50	2,50	2,50	3,15	3,15	3,15
Overall diameter	mm nom	35,0	38,0	40,5	44,5	44,0	48,0	51,0	54,0	59,5	64,5	69,5
Normal drum length	m	500	500	500	300	300	300	300	300	300	300	300
Cable mass	kg/m app.	3,7	4,3	5,0	6,1	6,7	8,1	9,4	10,8	13,3	16,1	18,9
Gross mass (drum length)	kg app.	1850	2150	2500	1830	2010	2430	2820	3240	3990	4830	5670
Bending radius	mm min.	420	456	486	534	528	576	612	648	714	774	834
Current rating												
In ground	Amps	92	118	141	168	208	250	285	321	363	421	474
In ducts	Amps	76	98	118	140	172	208	237	267	304	353	398
In air	Amps	91	118	143	172	216	264	305	348	402	475	544
Positive sequence												
Resistance dc @ 20°C	Ω/km max	1,15	0,727	0,524	0,387	0,268	0,193	0,153	0,124	0,0991	0,0754	0,0601
ac @ 80°C	Ω/km	1,421	0,899	0,648	0,479	0,332	0,239	0,190	0,155	0,124	0,096	0,077
Reactance	Ω/km	0,102	0,097	0,094	0,090	0,073	0,068	0,067	0,065	0,063	0,062	0,060
Impedance at 80°C	Ω/km	1,425	0,904	0,654	0,487	0,340	0,249	0,201	0,168	0,139	0,113	0,098
Zero sequence												
Resistance	Ω/km	3,610	2,909	2,455	1,905	1,750	1,498	1,340	1,209	0,935	0,810	0,725
Reactance	Ω/km	0,131	0,124	0,118	0,112	0,114	0,108	0,105	0,101	0,098	0,095	0,092
Impedance	Ω/km	3,612	2,912	2,458	1,909	1,753	1,502	1,344	1,213	0,940	0,816	0,731
Short circuit ratings												
Symmetrical	kA (1sec)	2,3	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)	9,4	10,2	11,3	14,5	14,6	16,3	17,8	19,3	25,4	28,6	31,4

* Circular Conductor

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

e.g. F1EC 3120 35 111 0K0S

Soil thermal resistance = 1,2Km/W

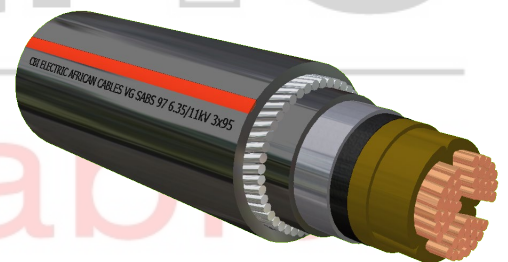
Soil temperature = 25°C

Depth of burial = 800mm

Air temperature = 30°C

+5% tolerance on dimensions

Single circuit in isolated



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