

Medium Voltage Paper Insulated Lead Alloy Covered Cables (PILAC)

Copper 3 Core
6350/11000V
Table 19
SANS 97

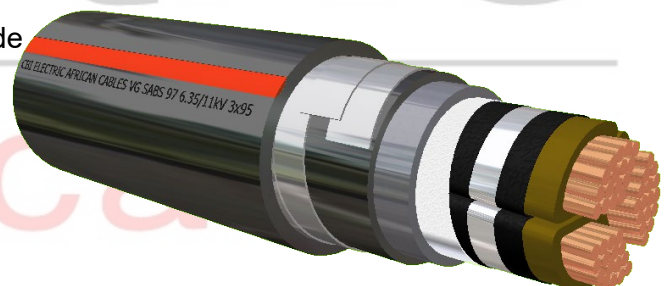
PILAC F1FC... Primary group code
FRPVC DTA FRPVC (red stripe) ...39 191 Table + Finish code
LHPVC DTA LHPVC (blue stripe) ...39 292

| 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. | 12,9 | 14,0 | 15,1 | 15,1 | 16,5 | 17,7 | 18,9 | 20,4 | 22,4 | 24,4 |
| Diameter over lead sheath | mm app. | 33,0 | 35,5 | 38,0 | 37,5 | 41,0 | 43,5 | 46,0 | 49,5 | 54,0 | 58,5 |
| Bedding diameter | mm app. | 36,0 | 38,0 | 41,0 | 40,5 | 44,0 | 46,5 | 49,5 | 53,0 | 58,0 | 62,0 |
| 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. | 44,0 | 46,5 | 49,0 | 49,0 | 52,5 | 55,5 | 59,0 | 63,0 | 67,5 | 72,5 |
| Normal drum length | m | 500 | 500 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| Cable mass | kg/m app. | 4,8 | 5,4 | 6,2 | 7,0 | 8,3 | 9,4 | 10,9 | 12,6 | 15,3 | 18,0 |
| Gross mass (drum length) | kg app. | 2900 | 3200 | 2360 | 2600 | 2990 | 3320 | 3770 | 4280 | 5090 | 5900 |
| Bending radius | mm min. | 528 | 558 | 588 | 588 | 630 | 666 | 708 | 756 | 810 | 870 |
| Current rating | | | | | | | | | | | |
| In ground | Amps | 115 | 140 | 165 | 200 | 240 | 270 | 300 | 340 | 395 | 440 |
| In ducts | Amps | 96 | 115 | 135 | 165 | 200 | 225 | 250 | 285 | 330 | 370 |
| In air | Amps | 120 | 145 | 175 | 210 | 255 | 295 | 330 | 380 | 445 | 510 |
| 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 | 0,150 | 0,1201 | 0,0923 | 0,0746 |
| Reactance | Ω/km | 0,115 | 0,109 | 0,105 | 0,086 | 0,081 | 0,078 | 0,076 | 0,073 | 0,070 | 0,068 |
| Impedance | Ω/km | 0,878 | 0,637 | 0,475 | 0,333 | 0,245 | 0,200 | 0,168 | 0,141 | 0,116 | 0,101 |
| Capacitance | μF/km | 0,334 | 0,372 | 0,414 | 0,413 | 0,465 | 0,509 | 0,552 | 0,606 | 0,678 | 0,748 |
| Zero sequence | | | | | | | | | | | |
| Resistance | Ω/km | 5,212 | 4,671 | 3,984 | 3,704 | 3,164 | 2,934 | 2,596 | 2,281 | 1,887 | 1,659 |
| Reactance | Ω/km | 0,117 | 0,113 | 0,109 | 0,111 | 0,106 | 0,103 | 0,100 | 0,097 | 0,094 | 0,091 |
| Impedance | Ω/km | 5,213 | 4,672 | 3,985 | 3,706 | 3,166 | 2,936 | 2,598 | 2,283 | 1,889 | 1,661 |
| 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) | 4,0 | 4,3 | 4,9 | 5,1 | 5,9 | 6,3 | 7,1 | 8,0 | 9,7 | 11,0 |

* Circular Conductor

When ordering please quote: primary + size + table + finish code
e.g. F1FC 3120 39 191 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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