DATA SHEET

Medium Voltage PILC Cables

CBi electric african cables

			Copper 1 Core
PILC/PILAC	F1HC…	Primary group code	12700/22000V
FRPVC (red stripe)	…31001	Table + Finish code	Table 11
LHPVC (blue stripe)	…31002		SANS 97

Size code	...naaa…	1150	1185	1240	1300	1400	1500	1630	1800	1999
Conductor size	mm² nom	150	185	240	300	400	500	630	800	1000
Conductor diameter	mm nom	14.7	16.5	18.8	21.2	23.9	27.4	30.3	34.2	38.9
Insulated diameter	mm nom	27.7	29.5	31.8	34.2	36.9	40.4	43.3	47.2	52.0
Diameter over lead sheath	mm nom	33.5	35.0	37.5	40.5	43.0	46.5	50.0	54.0	59.0
Overall diameter	mm nom	36.5	38.5	41.0	44.0	47.0	51.0	54.5	59.0	64.0
Normal drum length	m	500	500	500	500	500	500	500	500	500
Cable mass	kg/m app.	4.1	4.7	5.6	6.5	7.7	9.2	11.0	13.3	16.3
Gross mass (drum length)	kg app.	2550	2850	3300	3750	4350	5100	6000	7150	8650
Bending radius	mm min.	913	963	1025	1100	1175	1275	1363	1475	1600
Current rating										
In ground	Amps	320	360	420	470	535	605	670	740	865
In ducts	Amps	290	330	380	430	485	545	605	665	770
In air	Amps	370	425	500	580	670	770	875	985	1185
Positive sequence										
Resistance dc @ 20°C	Ω/km max	0.1240	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176
ac @ 70°C	Ω/km max	0.149	0.120	0.092	0.074	0.059	0.047	0.038	0.032	0.023
Reactance	Ω/km	0.121	0.116	0.112	0.106	0.103	0.100	0.097	0.094	0.091
Impedance at 70°C	Ω/km	0.192	0.167	0.145	0.129	0.118	0.110	0.104	0.099	0.094
Zero sequence										
Resistance	Ω/km	1.504	1.399	1.214	1.063	0.930	0.850	0.751	0.657	0.544
Reactance	Ω/km	0.068	0.064	0.061	0.054	0.051	0.048	0.045	0.043	0.040
Impedance	Ω/km	1.506	1.400	1.216	1.064	0.932	0.851	0.752	0.658	0.546
Short circuit ratings										
Symmetrical	kA (1sec)	21.5	26.9	35.3	44.3	56.7	72.8	94.1	121	151
Earth fault(Symmetrical limit)	kA (1sec)	4.6	4.9	5.6	6.3	7.2	7.8	8.8	10.0	12.0

Last updated May 2006

When ordering please quote: primary + size + table + finish code
e.g. F1HC 1500 31 001

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