Application

Aerial Insulated Cables with voltages of 10kV.The products primarily used for the distribution of electrical energy under normal conditions of overhead (aerial) installations.The conductors must be installed on insulators and/or spacers adequate for the service voltage. The user may want to give consideration to the dielectric compatibility of the covering, insulator, spacer etc.

Description

The conductors are stranded,circular compressed aluminum, aluminum-alloy, copper. The conductor screen is the extruded Semi-conducting conductor shield in Black. And the outer Insulation is mainly thermoplastic polyethylene (PE) or cross-linked polyethylene (XLPE) in Black with Weather or UV resistant. This standard covers both thermoplastic and cross linked polyethylene constructions, rated for 75°C or 90°C normal service temperature.

Specifications

• GB/T 14049 (Equal to IEC 60502-2) Aerial Insulated Cables For Rated Voltage of 10kV

Type	No. of Cores	Nominal size
		mm2
CU/XLPE,AAC/XLPE,AAAC/XLPE	1	10 ~ 400
	3	25 ~ 400
	3+k(A) or 3+k(B)	25 ~ 400 ; k:25~120
CU/PE,AAC/PE,AAAC/PE,CU/XLPE,AAC/XLPE,AAAC/XLPE	1	10 ~ 400
AAC/XLPE,AAAC/XLPE	3	25 ~ 400
	3+k(A) or 3+k(B)	25 ~ 400 ; k:25~120

Parameter

IEC 60502-2

10kV Aerial Insulated Cables

Nominal Size	Min. No. of Wires	Approx. Diameter of Conductor	Min. Thickness of Conductor screen	Nominal Thickness of Insulation		Nominal Thickness of Insulation Screen	Max. DC Resistance at 20 0C		Min. Breaking Load
			(Approx.)	Reduced	Nominal		Hard Copper	Soft Copper	Hard Copper
mm2	No.	mm	mm	mm	mm	mm	Ω/km	Ω/km	N
10	6	3.8	0.5	-	3.4	-	-	1.83	-
16	6	4.8	0.5	-	3.4	-	-	1.15	-
25	6	6	0.5	2.5	3.4	1	0.749	0.727	8465
35	6	7	0.5	2.5	3.4	1	0.54	0.524	11731
50	6	8.3	0.5	2.5	3.4	1	0.399	0.387	16052
70	12	10	0.5	2.5	3.4	1	0.276	0.268	23461
95	15	11.6	0.6	2.5	3.4	1	0.199	0.193	31759
120	18	13	0.6	2.5	3.4	1	0.158	0.153	39911
150	18	14.6	0.6	2.5	3.4	1	0.128	-	49505
185	30	16.2	0.6	2.5	3.4	1	0.1021	-	61846
240	34	18.4	0.6	2.5	3.4	1	0.0777	-	79823

300	34	20.6	0.6	2.5	3.4	1	0.0619	-	99788
400	53	23.8	0.6	2.5	3.4	1	0.0484	-	133040

10kV Aerial Insulated Cables

Nominal Size	Min. No. of Wires	Approx. Diameter of Conductor	Min. Thickness of Conductor Screen	Nominal Thickness of Insulation		Nominal Thickness of Insulation Screen	Max. DC Resistance at 20 0C		Min. Breaking Load	
			(Approx.)	Reduced	Nominal		AAC	AAAC	AAC	AAAC
mm2	No.	mm	mm	mm	mm	mm	Ω/km	Ω/km	N	N
10	6	3.8	0.5	-	3.4	-	3.08	3.574	-	-
16	6	4.8	0.5	-	3.4	-	1.91	2.217	-	-
25	6	6	0.5	2.5	3.4	1	1.2	1.393	3762	6284
35	6	7	0.5	2.5	3.4	1	0.868	1.007	5177	8800
50	6	8.3	0.5	2.5	3.4	1	0.641	0.744	7011	12569
70	12	10	0.5	2.5	3.4	1	0.443	0.514	10354	17596
95	15	11.6	0.6	2.5	3.4	1	0.32	0.371	13727	23880
120	18	13	0.6	2.5	3.4	1	0.253	0.294	17339	30164
150	18	14.6	0.6	2.5	3.4	1	0.206	0.239	21033	37706
185	30	16.2	0.6	2.5	3.4	1	0.164	0.19	26732	46503
240	34	18.4	0.6	2.5	3.4	1	0.125	0.145	34679	60329
300	34	20.6	0.6	2.5	3.4	1	0.1	0.116	43349	75411
400	53	23.8	0.6	2.5	3.4	1	0.0778	0.0904	55707	100548

IEC 60502-2

22.9kV ACSR/AW-OC Aerial Insulated Cables

Size (mm2)	No. and Dia. of Wires		Conductor Diameter	InsulatioThickness	Cable Diameter	Rated Strength	Weight
	AL	St					
	No.	No. /mm	mm	mm	mm	kgf	kg/km
22.9 kV ACSR/AW-OC/XLPE							
32	6/SB	1/2.6	7.2	3	13.2	1090	210
58	6/SB	1/3.5	9.7	3	15.7	1900	330
95	6/SB	1/3.5	12	3.5	19	2360	530
160	18/SB	1/3.2	15.4	4	23.4	3080	730
240	18/SB	1/4.0	18.9	4	27	4500	1040