



AAC — All Aluminium Conductor

Aluminium rope for overhead line

APPLICATION

AAC, AAAC, ACSR form part of the family of Overhead Conductors, Transmission Conductors and Power Distribution Conductors. These cables are formally known as All Aluminium Conductor (AAC), All Aluminium Alloy Conductor (AAAC) and Aluminium Conductor Steel Reinforced (ACSR). These overhead aluminium conductors are used as power transmission and distribution lines. All aluminium conductors are made up of one or more strands of aluminium wire depending on the specific application.

AAC are a refined Aluminium stranded conductor with a minimum metal purity of 99.7%. It is principally used in urban areas where spacing is short and the supports are close. It can be used in coastal regions owing to its high degree of corrosion resistance and is also used extensively within the Railway and Metro industries.

STANDARD

EN 50182, DIN 48204

CORE IDENTIFICATION

According to HD 308 S2

CODE	OLD CODE	SECTION	STRANDING	OVERALL DIAMETER	RATED STRENGTH	EL. RESISTANCE AT 20°C	CONDUCTOR WEIGHT	CURRENT CARRYING CAPACITY
		mm ²	No. x mm	mm	kN	Ω/km	kg/km	Amps
16-AL1	16	15,9	7x1,70	5,1	3,02	1,7986	43,4	110
24-AL1	25	24,2	7x2,10	6,3	4,36	1,1787	66,3	144
34-AL1	35	34,4	7x2,50	7,5	6,01	0,8317	93,9	180
49-AL1	50	49,5	7x3,00	9,0	8,41	0,5776	135,2	225
48-AL1	50	48,3	19x1,80	9,0	8,94	0,5944	135,2	225
66-AL1	70	65,8	19x2,10	10,5	11,85	0,4367	180,9	270
93-AL1	95	93,3	19x2,50	12,5	16,32	0,3081	256,3	340
117-AL1	120	117	19x2,80	14,0	19,89	0,2456	321,5	390
147-AL1	150	147,1	37x2,25	15,8	26,48	0,1960	405,7	455
182-AL1	185	181,6	37x2,50	17,5	31,78	0,1588	500,9	520
243-AL1	240	242,5	61x2,25	20,3	43,66	0,1193	671,1	625
299-AL1	300	299,4	61x2,50	22,5	52,40	0,0966	828,5	710
400-AL1	400	400,1	61x2,89	26,0	68,02	0,0723	1107,1	855
452-AL1	450	451,5	61x3,07	27,6	74,50	0,0641	1249,3	925
500-AL1	500	499,8	61x3,23	29,1	82,47	0,0579	1382,9	990
626-AL1	625	626,2	91x2,96	32,6	106,45	0,0464	1739,7	1140
802-AL1	800	802,1	91x3,35	36,9	132,34	0,0362	2228,3	1340
1000-AL1	1000	999,7	91x3,74	41,1	159,95	0,0291	2777,3	1540