



Tam Alüminyum İletkenler Teknik Özellikler

All Aluminium Conductor Technical Specifications

Related Standart / İlgili Standart : EN 50182 (New Code)

Characteristics of aluminium alloy conductors used in Spain – Type AL2

CODE	Old Code	Area	No Of Wires	DIAMETER		Mass per Unit length	Rated Strength	DC Resistance	Current Carrying Capacity I(A)
				Wire	Cond.				
		mm ²		mm	mm	kg/km	Kn	Ω/km	
28-AL2	D 28	27,8	7	2,25	6,8	76,0	9,05	1,193 0	175
43-AL2	D 40	43,1	7	2,80	8,4	117,7	14,01	0,7704	230
55-AL2	D 56	54,6	7	3,15	9,5	148,9	17,73	0,6087	266
76-AL2	D 80	75,5	19	2,25	11,3	207,4	24,55	0,442	326
117-AL2	D 110	117,0	19	2,80	14,0	321,2	38,02	0,2854	428
148-AL2	D145	148,1	19	3,15	15,8	406,5	48,12	0,2255	496
188-AL2	D 180	188,1	19	3,55	17,8	516,3	59,24	0,1176	707
279-AL2	D 280	279,3	37	3,10	21,7	769,3	90,76	0,12	735
381-AL2	D 400	381,1	61	2,82	25,4	1 053,0	123,82	0,0882	892
454-AL2	D 450	454,5	61	3,08	27,7	1 256,1	147,71	0,074	996
547-AL2	D 550	547,3	61	3,38	30,4	1 512,7	177,88	0,0614	1119
638-AL2	D 630	638,3	61	3,65	32,9	1 764,0	201,06	0,0527	1233

NOTE Direction of lay of external layer is right-hand (Z)

Characteristics of aluminium alloy conductors used in Germany -Type AL3

CODE	Old Code	Area	No Of Wires	DIAMETER		Mass per Unit length	Rated Strength	DC Resistance	Final modulus of elasticity	Coefficient of linear expansion	Current Carrying Capacity
				Wire	Cond.						
		mm ²		mm	mm	kg/km	Kn	Ω/km	N/mm2	1/K	A
16-AL3	16	15,9	7	1,70	5,10	43,4	4,69	2,070 1	60 000	2,30-05	105
24-AL3	25	24,2	7	2,10	6,30	66,2	7,15	1,356 6	60 000	2,30-05	135
34-AL3	35	34,4	7	2,50	7,50	93,8	10,14	0,957 2	60 000	2,30-05	170
49-AL3	50	49,5	7	3,00	9,00	135,1	14,60	0,664 7	60 000	2,30-05	210
48-AL3	50	48,3	19	1,80	9,00	132,7	14,26	0,684 1	57 000	2,30-05	210
66-AL3	70	65,8	19	2,10	10,5	180,7	19,41	0,502 6	57 000	2,30-05	255
93-AL3	95	93,3	19	2,50	12,5	256,0	27,51	0,354 6	57 000	2,30-05	320
117-AL3	120	117,0	19	2,80	14,0	321,2	34,51	0,282 7	57 000	2,30-05	365
147-AL3	150	147,1	37	2,25	15,8	405,3	43,40	0,225 6	57 000	2,30-05	425
182-AL3	185	181,6	37	2,50	17,5	500,3	53,58	0,182 7	57 000	2,30-05	490
243-AL3	240	242,5	61	2,25	20,3	670,3	71,55	0,137 3	55 000	2,30-05	585
299-AL3	300	299,4	61	2,50	22,5	827,5	88,33	0,111 2	55 000	2,30-05	670
400-AL3	400	400,1	61	2,89	26,0	1 105,9	118,04	0,083 2	55 000	2,30-05	810
500-AL3	500	499,8	61	3,23	29,1	1 381,4	147,45	0,066 6	55 000	2,30-05	930
626-AL3	625	626,2	91	2,96	32,6	1 737,7	184,73	0,053 4	55 000	2,30-05	1 075
802-AL3	800	802,1	91	3,35	36,9	2 225,8	236,62	0,041 7	55 000	2,30-05	1 255
1000-AL3	1000	999,7	91	3,74	41,1	2 774,3	249,91	0,033 4	55 000	2,30-05	1 450

NOTE 1: Direction of lay of external layer is right-hand (Z)

NOTE 2 : Values of final modulus of elasticity and coefficient of linear expansion for the conductor sizes listed in the Table are used in Germany.Values for other conductor constructions may be calculated using the method given in IEC 61597

NOTE 3 : Guideline values of current carrying capacity are valid up to a frequency of 60 Hz, assuming a wind velocity of 0,6 m/s,the effect of solar initial ambient temperature of 35C and a conductor temperature of 80C.For special applications,when there is no air turbulence,the values should be reduced by 30 %.radiation for Germany an