

Aluminum Conductor Aluminum-Alloy Reinforced

IEC 61809, Characteristics of Aluminum Conductor Aluminum-Alloy Reinforced

Code Number (mm ²)	Number of Wires		A1/A2 Conductor				A1/A3 Conductor				Max.D.C.
	Al	Alloy	Dia. Of Wires	Dia.of Conductor	Approx. Weight	Rated Strength	Dia. Of Wires	Dia.of Conductor	Approx. Weight	Rated Strength	Resistance of Conductor at 20°C
	-	-	mm	mm	kg/km	kN	mm	mm	kg/km	kN	Ω/km
16	4	3	1.76	5.28	46.6	3.85	1.76	5.29	46.8	4.07	1.7896
25	4	3	2.2	6.6	72.8	5.93	2.21	6.62	73.1	6.29	1.1453
40	4	3	2.78	8.35	116.5	9.25	2.79	8.37	117	9.82	0.7158
63	4	3	3.49	10.5	183.5	14.38	3.5	10.5	184.3	14.8	0.4545
100	4	3	4.4	13.2	291.2	22.52	4.41	13.2	292.5	23.49	0.2863
125	12	7	2.97	14.9	362.7	27.79	2.98	14.9	364.1	29.29	0.2302
160	12	7	3.36	16.8	464.2	35.04	3.37	16.9	466	36.95	0.1798
200	12	7	3.76	18.8	580.3	43.13	3.77	18.8	582.5	44.78	0.1439
250	12	7	4.21	21	725.3	53.92	4.21	21.1	728.1	55.98	0.1151
250	18	19	3.04	21.3	742.2	60.39	3.05	21.4	746	64.67	0.1154
315	30	7	3.34	23.4	892.6	60.52	3.34	23.4	894.4	62.4	0.0916
315	18	19	3.42	23.9	935.1	76.09	3.43	24	940	81.48	0.0916
400	30	7	3.76	26.3	1133.5	75.19	3.77	26.4	1135.8	76.82	0.0721
400	18	19	3.85	27	1187.5	95.58	3.86	27	1193.7	100.3	0.0721
450	30	7	3.99	27.9	1275.2	84.59	3.99	28	1277.8	86.42	0.0641
450	18	19	4.08	28.6	1335.9	107.52	4.1	28.7	1342.9	112.84	0.0641
500	30	7	4.21	29.4	1416.9	93.98	4.21	29.5	1419.8	96.03	0.0577
500	18	19	4.31	30.1	1484.3	119.47	4.32	30.2	1492.1	125.38	0.0577
560	30	7	4.45	31.2	1586.9	105.26	4.46	31.2	1590.1	107.55	0.0515
560	54	7	3.45	31	1571.9	101.54	3.45	31.1	1573.9	103.53	0.0516
630	42	19	3.71	33.4	1820	130.25	3.72	33.4	1826	134.59	0.0458
630	24	37	3.79	34.1	1897.5	160.19	3.8	34.2	1909	169.14	0.0458
710	42	19	3.94	35.5	2051.2	146.78	3.95	35.5	2057.8	151.68	0.0407
710	24	37	4.02	36.2	2138.4	180.53	4.03	36.3	2151.4	190.61	0.0407
800	42	19	4.18	37.6	2311.2	165.39	4.19	37.7	2318.7	170.9	0.0361
800	24	37	4.27	38.4	2409.5	203.41	4.28	38.5	2424.2	214.78	0.0361
900	42	19	4.43	39.9	2600.1	186.06	4.44	40	2608.5	192.27	0.0321
900	54	37	3.66	40.2	2638.4	199.54	3.66	40.3	2649.5	207.79	0.0321
1000	72	19	3.8	41.8	2849.1	190.94	3.8	41.8	2855.4	195.47	0.0289
1000	54	37	3.85	42.4	2931.6	221.71	3.86	42.5	2943.9	230.88	0.0289
1120	72	19	4.02	44.2	3191	213.85	4.02	44.3	3198.1	218.92	0.0258
1120	54	37	4.08	44.9	3283.4	248.32	4.09	45	3297.2	258.58	0.0258
1250	72	19	4.25	46.7	3561.4	238.68	4.25	46.8	3569.3	244.33	0.0231
1250	54	37	4.31	47.4	3664.5	277.14	4.32	47.5	3679.9	288.6	0.0231
1400	72	19	4.5	49.4	3988.8	267.32	4.5	49.5	3997.6	273.65	0.0207