ALUMINIUM ALLOY CONDUCTOR - AAAC 1120

Construction

Aluminium Alloy 1120 wires, concentrically stranded.

Values based on following Specifications:•

- Australian Standard (Conductors - Bare Overhead - Aluminium & Aluminium Alloy)

Applications

Used as bare overhead conductor for primary and secondary distribution. Designed utilizing a high-Ampacity Aluminium alloy to achieve a moderate strength-to-weight ratio; affords better Power Transfer characteristics. Aluminium alloy gives AAAC-6201 higher resistance to corrosion than ACSR.

Conductor Code Names	Stranding and wire diameter	Approx, overall	Total area	Weight	Nominal breaking load	Max. DC Resistance at 20°C
	No./mm	mm	mm^2	Kg/Km	KN	Ohm/Km
Chlorine	7/2.50	7.50	34.36	94.3	8.18	0.864
Chromium	7/2.75	8.25	41.58	113.0	9.91	0.713
Flourine	7/3.00	9.00	49.48	135.0	11.80	0.599
Helium	7/3.75	11.25	77.31	211.0	17.60	0.382
Hydrogen	7/4.50	13.50	111.33	304.0	24.30	0.266
Iodine	7/4.75	14.25	124.04	339.0	27.10	0.239
Krypton	19/3.25	16.25	157.62	433.0	37.40	0.189
Lutenium	19/3.50	17.50	182.80	503.0	41.70	0.163
Neon	19/3.75	18.75	209.85	576.0	47.80	0.142
Nitrogen	37/3.00	21.00	261.54	721.0	62.10	0.114
Nobelium	37/3.25	22.75	306.94	846.0	72.80	0.0913
Oxygen	19/4.75	23.75	336.69	924.0	73.60	0.0884
Phosphorus	37/3.75	26.25	408.65	1120.0	93.10	0.0731
Selenium	61/3.25	29.25	506.04	1400.0	114.00	0.0582
Silicon	61/3.50	31.50	586.89	1630.0	127.00	0.0516
Sulfur	61/3.75	33.75	673.73	1860.0	145.00	0.0444

AL59 ALUMINIUM ALLOY CONDUCTOR - AL 59

Construction

Aluminium Alloy AL59 wires, concentrically stranded.

Values based on following Specifications:

- Swedish Specification SS 424 08 14

Applications

Used as bare overhead conductor for primary and secondary distribution. Designed utilizing a high-Ampacity Aluminium alloy to achieve a high strength-to-weight ratio; affords better Power Transfer characteristics. AL-59 Aluminium alloy higher resistance to corrosion than ACSR.

Designation	Equivalent copper area	Stranding and wire diameter	Approx, overall diameter	Total area	Weight	Nominal breaking load	Max. DC Resistance at 20°C
mm^2	mm^2	No./mm	mm	mm^2	Kg/Km	KN	Ohm/Km
31	18.48	7/2.38	7.14	31.14	85	7.77	0.9430
62	37.06	7/3.37	10.11	62.44	170	15.60	0.4700
99	58.93	7/4.25	12.75	99.30	271	22.80	0.2960
157	94.12	19/3.26	16.30	158.59	436	39.70	0.1860
241	143.13	19/4.02	20.10	241.16	663	55.50	0.1230
329	195.87	37/3.37	23.60	330.03	910	82.50	0.0899
454	269.74	61/3.08	27.72	454.49	1260	113.00	0.0654
593	352.31	61/3.52	31.68	593.62	1640	143.00	0.0501
774	459.51	61/4.02	36.18	774.24	2140	178.00	0.0384
910	540.52	61/4.36	39.20	910.74	2520	209.00	0.0326

AL57 ALUMINIUM ALLOY CONDUCTOR (AlMgSi) - AL 57

Construction

Aluminium Alloy AL 57 wires, concentrically stranded.

Values based on following Specifications:

- Swedish Specification SS 424 08 12

Applications

Used as bare overhead conductor for primary and secondary distribution. Designed utilizing a high-Ampacity Aluminium alloy to achieve a high strength-to-weight ratio; affords better Power Transfer characteristics. AL-57 Aluminium alloy higher resistance to corrosion than ACSR.

Designation	Equivalent copper area	Stranding and wire diameter	Approx, overal	Total area	Weight	Nominal breaking load	Max. DC Resistance
mm^2	mm^2	No./mm	mm	mm^2	Kg/Km	KN	Ohm/Km
31	17.90	7/2.38	7.14	31.14	85	9.31	0.9740
62	35.88	7/3.37	10.11	62.44	170	17.20	0.4860
99	57.07	7/4.25	12.75	99.30	271	25.30	0.3050
157	91.14	19/3.26	16.30	158.59	436	43.70	0.1930
241	138.59	19/4.02	20.10	241.16	663	61.60	0.1270
329	189.67	37/3.37	23.60	330.03	910	90.70	0.0928
454	261.20	61/3.08	27.72	454.49	1260	125.16	0.0675
593	341.15	61/3.52	31.68	593.62	1640	157.00	0.0517
774	444.96	61/4.02	36.18	774.24	2140	197.00	0.0396
910	523.40	61/4.36	39.20	910.74	2520	232.00	0.0337