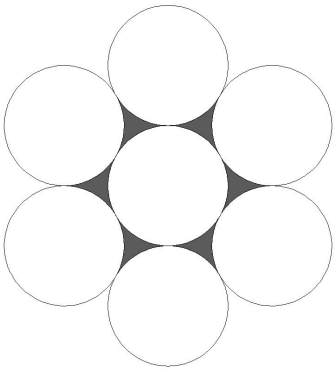
All-Aluminum Conductor(AAC)

APPLICATION:

AAC – All Aluminum Conductor is for stranded 1350-H19 aluminum conductors and is primarily used for overhead transmission and distribution services.



STANDARDS:

- ASTM B-230
- ASTM B-231
- BS 215/AS 1531
- IEC 61089/EN 50182

Qualification Certificate:

For more information, please visit our website:

https://www.huilicablegroup.com/aac-all-aluminum-conductor.html

CONSTRUCTION:

- 1350-H19 Aluminum wires.
- AAC is available single layer and multi-layer constructions.

TECHNICAL PARAMETERS:

ALL ALUMINUM CONDUCTOR(AAC) BS 215

Nominal Aluminum Area	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
		No.of Aluminium Wires	Individual wire Diameter					75℃	85℃
	mm²	No.	mm	mm	Kg/m	KN	Ω/Km	A	A
22	23.33	7	2.06	6.18	64.0	3.99	1.2270	101	120
50	52.83	7	3.10	9.30	145.0	8.28	0.5419	165	198
60	63.55	7	3.40	10.20	174.0	9.90	0.4505	184	222
100	106.00	7	4.39	13.17	290.0	16.00	0.2702	249	303
150	157.60	19	3.25	16.25	434.0	25.70	0.1825	314	385
200	213.20	19	3.78	18.90	587.0	32.40	0.1349	374	462
250	265.70	19	4.22	21.10	731.0	40.40	0.1083	424	527
300	322.70	19	4.65	23.25	888.0	48.75	0.0892	473	592
400	415.20	37	3.78	26.46	1145.0	63.10	0.0694	544	687

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

ALL ALUMINUM CONDUCTOR(AAC) AS 1531

Code Name	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
		No.of Aluminium Wires	Individual wire Diameter					75℃	85℃
	mm²	No.	mm	mm	Kg/ m	KN	Ω/Km	A	A
Leo	34.36	7	2.50	7.50	94.3	5.71	0.8330	128	152
Leonids	41.58	7	2.75	8.25	113.0	6.72	0.6890	143	171
Libra	49.48	7	3.00	9.00	135.0	7.98	0.5790	159	190
Mars	77.31	7	3.75	11.30	211.0	11.80	0.3700	207	250
Mercury	111.30	7	4.50	13.50	304.0	16.90	0.2580	256	311
Moon	124.04	7	4.75	14.30	339.0	18.90	0.2320	272	332
Neptune	157.62	19	3.25	16.30	433.0	24.70	0.1830	313	385
Orion	182.80	19	3.50	17.50	503.0	28.70	0.1570	342	422
Pluto	209.85	19	3.75	18.80	576.0	31.90	0.1370	370	458
Saturn	261.54	37	3	21	721	42.2	0.11	420	523
Sirius	306.94	37	3.25	22.8	845	48.2	0.094	460	575
Taurus	336.69	19	4.75	23.8	924	51.3	0.0857	484	607
Triton	408.65	37	3.75	26.3	1120	42.2	0.0706	540	681
Uranus	506.04	61	3.25	29.3	1400	48.2	0.0572	606	771
Ursula	586.89	61	3.5	31.5	1620	51.3	0.0493	657	840
Venus	673.73	61	3.75	33.8	1860	97.2	0.0429	707	910

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

ALL ALUMINUM CONDUCTOR(AAC) IEC 61089

Nominal Area	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20°C	Current Capacity	
		No.of Aluminium Wires	Individual wire Diameter					75°C	85°C
	mm²	No.	mm	mm	Kg/ m	KN	Ω/Km	A	A
10	10.02	7	1.35	4.05	27.4	1.95	2.8633	61	72
16	16.08	7	1.71	5.12	43.8	3.04	1.7896	81	95
25	24.94	7	2.13	6.40	68.4	4.50	1.1453	106	125
40	40.08	7	2.70	8.09	109.4	6.80	0.7158	140	167
63	63.18	7	3.39	10.20	172.3	10.39	0.4545	183	221
100	100.10	19	2.59	12.90	274.8	17.00	0.2877	240	292
125	124.64	19	2.89	14.50	343.6	21.25	0.2302	274	335
160	159.57	19	3.27	16.40	439.8	26.40	0.1798	317	389
200	199.90	19	3.66	18.30	549.7	32.00	0.1439	360	444
250	249.63	19	4.09	20.5	687.1	40	0.1151	409	508
315	314.55	37	3.29	23	867.9	51.97	0.0916	466	583
400	399.98	37	3.71	26	1102	64	0.0721	533	672
450	451.11	37	3.94	27.5	1239.8	72	0.0641	569	720
500	500.48	37	4.15	29	1377.6	80	0.0577	603	766
560	560.04	37	4.39	30.7	1542.9	89.6	0.0515	641	819
630	631.3	61	3.63	32.6	1738.3	100.8	0.0458	683	876
710	710.14	61	3.85	34.6	1959.1	113.6	0.0407	726	938
800	801.43	61	4.09	36.8	2207.4	128	0.0361	773	1003
900	898.25	61	4.33	39	2483.3	144	0.0321	820	1071
1000	1000.58	61	4.57	41.1	2759.2	160	0.0289	863	1134
1120	1120.79	91	3.96	43.5	3093.5	179.2	0.0258	911	1204
1250	1248.78	91	4.18	46	3452.6	200	0.0231	958	1275
1400	1402.62	91	4.43	48.7	3866.9	224	0.0207	1005	1347
1500	1499.21	91	4.58	50.4	4143.1	240	0.0193	1034	1393

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

ALL ALUMINUM CONDUCTOR(AAC) EN 50182

Code Word	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20°C	Current Capacity	
		No.of Aluminium Wires	Individual wire Diameter					75°C	85°C
	mm²	No.	mm	mm	K g/m	KN	Ω/Km	A	A
24-AL1	24.20	7	2.10	6.30	66.3	4.36	1.1787	104	123
34-AL1	34.30	7	2.50	7.50	93.9	6.01	0.8317	128	152
49-AL1	49.50	7	3.00	9.00	135.2	8.41	0.5776	159	191
66-AL1	65.80	19	2.10	10.50	180.9	11.85	0.4367	188	227
93-AL1	93.90	19	2.50	12.50	256.3	16.32	0.3081	231	280
117-AL1	117.00	19	2.80	14.00	321.5	19.89	0.2456	264	322
147-AL1	147.10	37	2.25	15.80	405.7	26.48	0.1960	301	369
182-AL1	181.60	37	2.50	17.50	500.9	31.78	0.1588	340	419
243-AL1	242.50	61	2.25	20.30	671.1	43.66	0.1193	401	498
299-AL1	299.4	61	2.5	22.5	828.5	52.4	0.0966	453	565
400-AL1	400.1	61	2.89	26	1107.1	68.02	0.0723	532	672
452-AL1	451.5	61	3.07	27.6	1249.3	74.5	0.0641	569	721
500-AL1	499.8	61	3.23	29.1	1382.9	82.47	0.0579	602	765
625-AL1	626.2	91	2.96	32.6	1739.7	106.45	0.0464	678	871
800-AL1	802.1	91	3.35	36.9	2228.3	132.34	0.0363	771	1001
1000-AL1	999.7	91	3.74	41.1	2777.3	159.95	0.0291	861	1130

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

ALL ALUMINUM CONDUCTOR(AAC) ASTM B231

Code Name	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @ 20℃	Current Capacity	
		No.of Aluminium Wires	Individual wire Diameter					75℃	85℃
	mm²	No.	mm	mm	Kg/m	KN	Ω/Km	A	A
Jessamine	885.84	61	4.30	38.70	2442.0	132.00	0.0324	816	1065
Coreopsis	805.36	61	4.10	36.90	2216.0	120.00	0.0357	777	1009
Gladiolus	766.55	61	4.00	36.00	2108.0	114.00	0.0375	758	982
Carnation	724.97	61	3.89	35.01	1997.0	108.00	0.0396	737	952
Columbine	684.55	61	3.78	34.02	1884.0	104.00	0.0420	715	921
Narcissus	645.29	61	3.67	33.03	1774.0	98.10	0.0445	693	891
Hawthorn	603.78	61	3.55	31.95	1662.0	93.50	0.0476	669	857
Marigold	563.65	61	3.43	30.87	1553.0	87.30	0.0510	644	823
Bluebell	524.89	37	4.25	29.75	1441.0	78.80	0.0547	620	790
Hawkweed	507.74	37	4.18	29.26	1395	76.2	0.0566	609	775
Magnolia	483.74	37	4.08	28.56	1553	76.2	0.0594	593	753
Goldenrod	484.48	61	3.18	28.62	1331	78.3	0.0593	594	754
Cockscomb	455.7	37	3.96	27.72	1256	72.6	0.0631	574	727
Arbutus	380.81	37	3.62	25.34	1109	61.8	0.0755	520	654
Petunia	362.11	37	3.53	24.71	1046	58.6	0.0794	505	635
Verbena	353.95	37	3.49	24.43	976	55.4	0.0812	499	626
Heuchera	330.03	37	3.37	23.59	907	51.7	0.0871	479	601
Orchid	322.24	37	3.33	23.31	887	50.4	0.0892	473	592
Meadowsweet	303.18	37	3.23	22.61	836	47.5	0.0948	457	571
Dahlia	282.37	19	4.35	21.75	776	43.3	0.1018	439	547
Zinnia	253.3	19	4.12	20.6	697	38.9	0.1134	413	513
Cosmos	241.16	19	4.02	20.1	665	37	0.1192	401	498
Goldentuft	228.14	19	3.91	19.55	628	35	0.126	389	481
Canna	200.99	19	3.67	18.35	555	31.6	0.143	361	446
Daisy	135.25	7	4.96	14.88	372	21.4	0.2125	287	350
Sneezewort	126.67	7	4.8	14.4	349	20.1	0.2268	276	337
Oxlip	107.41	7	4.42	13.26	295	17	0.2675	250	305
Phlox	84.91	7	3.93	11.79	234	13.5	0.3384	218	264
Aster	67.35	7	3.5	10.5	186	11.1	0.4266	190	229

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.