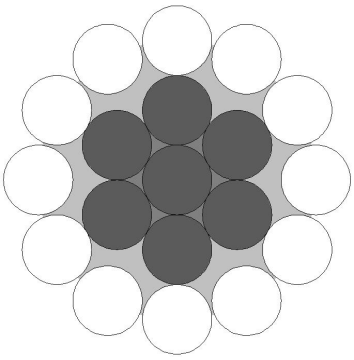
Aluminium Alloy Conductor Steel Reinforced(AACSR)

APPLICATION:

Aluminum Alloy Conductor Steel Reinforced consist of a solid or stranded steel core surrounded by outer layers of aluminum alloy strands. AACSR Conductors have approx. 40% to 60% more strength than comparable standard ACSR with only 8 to 10% decrease in conductivity.High-strength AACSR conductors are frequently used for river crossings, overhead ground wires, and extra-long span transmission projects. AACSR conductors with varying tensile strengths can be manufactured to meet specific requirements while maintaining constant electrical resistance,offering significant advantages for high-voltage and ultra-high-voltage overhead transmission lines.



STANDARDS:

- ASTM B-711
- AS 3607
- IEC 61089/EN 50182

Qualification Certificate:

For more information, please visit our website:

https://www.huilicablegroup.com/aacsr-aluminum-alloy-conductor-steel-reinforced.html

CONSTRUCTION:

- 6201 Aluminum Alloy Wires.
- Galvanized Steel Core.
- Anti-Corrosion Grease

TECHNICAL PARAMETERS:

ALUMINUM ALLOY CONDUCTOR STEEL REINFORCED(AACSR) AS 3607

Code Name	Sectional Area	Stranding				Outer Diameter	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
		No.of Wires		Wire diameter						75℃	85℃
		Alloy	Steel	Alloy	Steel						
	mm²	No.	No.	mm	mm	mm	Kg/Km	KN	Ω/K m	A	A
Apple	49.48	6	1	3.00	3.00	9.00	171	20.2	0.785	128	154
Banana	77.31	6	1	3.75	3.75	11.25	268	31.5	0.503	167	202
Cherry	120.4	6	7	4.75	1.60	14.30	402	47.4	0.313	221	270
Fig	182.8	18	1	3.50	3.50	17.50	552	60.8	0.193	311	384
Lemon	261.5	30	7	3.00	3.00	21.00	973	117	0.158	354	441
Lime	356.0	30	7	3.50	3.50	24.50	1320	158	0.116	422	531

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.

ALUMINUM ALLOY CONDUCTOR STEEL REINFORCED(AACSR) ASTM B711

Sectional Area			Stranding				Outer Diameter	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
Alloy	Stell	Total	No.of Wires		Wire diameter						75℃	85℃
			Alloy	Steel	Alloy	Steel						
mm²	mm²	mm²	No.	No.	mm	mm	mm	Kg/Km	KN	Ω/K m	A	A
1250	102	1352	84	19	4.35	2.61	47.85	4255.00	490.00	0.02710	913	1221
1120	91	1211	84	19	4.12	2.47	45.31	3816.00	439.00	0.03021	866	1151
1000	81	1081	84	19	3.89	2.33	42.77	3400.00	391.00	0.03388	818	1079
900	73	973	84	19	3.69	2.21	40.57	3060.00	355.00	0.03766	775	1017
800	101	901	54	19	4.34	2.60	39.04	3003.00	363.00	0.04234	722	943
710	90	800	54	19	4.09	2.45	36.79	2664.00	322.00	0.04768	678	881
630	80	710	54	19	3.85	2.31	34.65	2365.00	286.00	0.05381	635	821
560	71	631	54	19	3.63	2.18	32.68	2104.00	257.00	0.06053	596	766
500	63	563	54	19	3.43	2.06	30.88	1878.00	229.00	0.06779	560	716
450	59	509	54	19	3.26	1.98	29.46	1706.00	215.00	0.07505	530	675
400	91	491	30	19	4.12	2.47	28.83	1818.00	237.00	0.08437	300	382
400	65	465	26	7	4.43	3.45	28.07	1616.00	207.00	0.08400	299	379
355	81	436	30	19	3.88	2.33	27.17	1614.00	211.00	0.09513	297	376
355	58	413	26	7	4.17	3.24	26.40	1430.00	183.00	0.09480	289	365
315	72	387	30	19	3.66	2.20	25.64	1438.00	190.00	0.10691	335	422
315	46	361	26	7	3.93	3.06	24.90	1272.00	163.00	0.10673	333	419
280	65	345	30	7	3.45	3.45	24.15	1286.00	171.00	0.12032	350	440
280	46	326	26	7	3.70	2.88	23.44	1127.00	144.00	0.12041	348	436
250	58	308	30	7	3.26	3.26	22.82	1149.00	156.00	0.13476	367	460
250	41	291	26	7	3.50	2.72	22.16	1008.00	129.00	0.13457	365	456
224	52	276	30	7	3.08	3.08	21.56	1025.00	139.00	0.15097	385	480
224	36	260	26	7	3.31	2.57	20.95	901.00	118.00	0.15046	383	477
200	47	247	30	7	2.91	2.91	20.37	915.00	124.00	0.16912	404	502
200	32	232	26	7	3.13	2.43	19.81	805.00	106.00	0.16826	402	499
180	42	222	30	7	2.76	2.76	19.32	823.00	112.00	0.18800	428	531
180	29	209	26	7	2.97	2.31	18.81	731.00	95.10	0.18688	423	524
160	38	198	30	7	2.61	2.61	18.27	736.00	106.00	0.21024	447	553
160	26	186	26	7	2.80	2.18	17.74	646.00	85.60	0.21026	444	548
140	33	173	30	7	2.44	2.44	17.08	643.00	87.40	0.24055	470	579
140	23	163	26	7	2.62	2.04	16.60	565.00	75.00	0.24014	466	574

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.

ALUMINUM ALLOY CONDUCTOR STEEL REINFORCED(AACSR) IEC 61089

Code Number	Area	Stranding				Outer Diameter	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
		No.of Wires		Wire diameter						75℃	85℃
		Alloy	Steel	Alloy	Steel						
	mm²	No.	No.	mm	mm	mm	Kg/Km	KN	Ω/K m	A	A
16	21.5	6	1	1.98	1.98	5.94	74.4	9.02	1.7934	78	93
25	33.6	6	1	2.47	2.47	7.41	116.2	13.96	1.1478	102	122
40	53.7	6	1	3.13	3.13	9.39	185.9	22.02	0.7174	135	163
63	84.6	6	1	3.92	3.92	11.76	292.8	34.68	0.4555	177	215
100	121	18	1	2.85	2.85	14.25	366.4	41.24	0.2880	246	301
125	152	18	1	3.19	3.19	15.95	458.0	51.23	0.2304	281	345
125	167	26	7	2.65	2.96	19.48	579.9	69.86	0.2310	290	359
160	194	18	1	3.61	3.61	18.05	586.2	65.58	0.1800	324	400
160	214	26	7	3.00	2.34	19.02	742.3	88.52	0.1805	326	404
200	243	18	1	4.04	4.04	20.20	732.8	81.97	0.1440	369	458
200	268	26	7	3.36	2.61	21.27	927.9	110.64	0.1444	371	462
250	316	22	7	4.08	2.27	23.13	1013.5	117.09	0.1154	420	526
250	335	26	7	3.75	2.92	23.76	1159.8	138.31	0.1155	421	529
315	388	45	7	3.20	2.14	25.62	1196.5	136.28	0.0917	471	594
315	422	26	7	4.21	3.28	26.68	1461.4	171.90	0.0917	480	607
400	492	45	7	3.61	2.41	28.89	1519.4	201.46	0.0722	538	685
400	520	54	7	3.29	3.29	29.61	1738.3	193.61	0.0723	540	688
450	554	45	7	3.83	2.55	30.63	1709.3	226.64	0.0642	574	734
450	585	54	7	3.49	3.49	31.41	1955.6	215.12	0.0643	576	738
500	615	45	7	4.04	2.69	32.31	1899.3	251.82	0.0578	608	781
500	650	54	7	3.68	3.68	33.12	2172.9	240.93	0.0578	611	785
560	691	45	7	4.27	2.85	34.17	2127.2	283.21	0.0516	647	834
560	728	54	19	3.90	2.34	35.10	2420.9	249.62	0.0516	649	840
630	756	72	7	3.58	2.39	35.81	2248.0	318.61	0.0459	696	902
630	817	54	19	4.13	2.48	37.18	2723.5	281.32	0.0459	691	899
710	852	72	7	3.80	2.53	37.99	2533.4	359.06	0.0407	741	966
710	921	54	19	4.39	2.63	39.49	3069.4	316.98	0.0407	737	964
800	961	72	7	4.04	2.69	40.39	2854.6	359.03	0.0361	789	1034
800	998	84	7	3.74	3.74	41.14	3145.1	359.03	0.0362	791	1039
900	1081	72	7	4.28	2.85	42.79	3211.4	356.60	0.0321	837	1104
900	1122	84	7	3.96	3.96	43.56	3538.3	400.53	0.0322	839	1109
1000	1245	84	19	4.18	2.51	45.99	3916.8	446.37	0.0298	873	1161
1120	1394	84	19	4.42	2.65	48.61	4368.6	499.93	0.0258	934	1252

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.