



Tomorrow's solutions today

ALL ALUMINUM ALLOY CONDUCTOR, ALUMINUM CLAD STEEL REINFORCED (AACSR/AW)

ALL ALUMINUM ALLOY CONDUCTOR, ALUMINUM CLAD STEEL REINFORCED (AACSR/AW): is a concentrically stranded conductor composed of one or more layers of Aluminium-Magnesium-Silicon alloy wire stranded over a High Strength Aluminum Clad Steel core. AACSR/AW Conductors have approx. 40% to 60% more strength than comparable standard ACSR with only 8 to 10% decrease in conductivity.

Construction

Aluminum 6201 Wires, concentrically stranded over a central wire/core of Aluminum Galvanized steel.



Features:

- Offers optimal strength for line design
- Improved strength to weight ratio
- Ideal for extra long spans and heavy load conditions
- Excellent resistance to corrosion

Available with Non-Specular (Dull) Surface Finish and Color Coated as per customized requirements.

ALL ALUMINUM ALLOY CONDUCTOR, ALUMINUM CLAD STEEL REINFORCED (AACSR/AW): IEC 61089/EN 50182 - Type A2/20SA

Code Number	Steel Ratio	Sectional Area			Stranding				Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @ 20°C	Current Capacity	
					No. of Wires		Wire diameter						@ 75°C	@ 85°C
		Alloy	Steel	Total	Aluminum	Steel	Aluminum	Steel						
-	%	(mm ²)	(mm ²)	(mm ²)	(No.)	(No.)	(mm)	(mm)	(mm)	(Kg/Km)	KN	(Ω/Km)	(Ampere)	(Ampere)
16	17	18.40	3.07	21.47	6	1	1.98	1.98	5.94	70.7	9.73	1.6868	81	96
25	17	28.80	4.80	33.60	6	1	2.47	2.47	7.41	110.5	15.00	1.0778	106	126
40	17	46.00	7.67	53.67	6	1	3.13	3.13	9.39	176.7	23.85	0.6748	140	168
63	17	72.50	12.10	84.60	6	1	3.92	3.92	11.76	278.4	37.05	0.4281	183	221
100	6	115.00	6.39	121.39	18	1	2.85	2.85	14.25	358.8	42.55	0.2822	249	304
125	6	144.00	7.99	151.99	18	1	3.19	3.19	15.95	448.5	53.07	0.2254	284	349
125	16	144.00	23.40	167.40	26	7	2.65	2.96	19.48	522.3	107.81	0.2172	299	370
160	6	184.00	10.20	194.20	18	1	3.61	3.61	18.05	574.0	67.66	0.1764	327	404
160	16	184.00	30.00	214.00	26	7	3.00	2.34	19.02	706.3	95.16	0.1700	336	417
200	6	230.00	12.80	242.80	18	1	4.04	4.04	20.20	717.5	84.73	0.1411	372	463
200	16	230.00	37.50	267.50	26	7	3.36	2.61	21.27	883.1	118.94	0.1360	382	476
250	10	288.00	28.30	316.30	22	7	4.08	2.27	23.13	979.6	124.23	0.1111	428	536
250	16	288.00	46.90	334.90	26	7	3.75	2.92	23.76	1103.8	148.46	0.1086	434	545
315	16	363.00	59.00	422.00	26	7	4.21	3.28	26.68	1390.7	185.44	0.0862	495	626
315	7	363.00	25.10	388.10	45	7	3.20	2.14	25.62	1166.4	141.76	0.0892	477	602
400	7	460.00	31.80	491.80	45	7	3.61	2.41	28.89	1481.2	179.30	0.0704	545	693
400	13	460.00	59.70	519.70	54	7	3.29	3.29	29.61	1667.2	214.57	0.0689	553	705
450	7	518.00	35.80	553.80	45	7	3.83	2.55	30.63	1666.6	201.56	0.0625	582	744
450	13	518.00	67.10	585.10	54	7	3.49	3.49	31.41	1875.6	241.45	0.0612	590	756
500	7	575.00	39.80	614.80	45	7	4.04	2.69	32.31	1851.8	224.28	0.0563	616	791
500	13	575.00	74.60	649.60	54	7	3.68	3.68	33.12	2083.9	266.22	0.0551	625	804
560	7	646.00	44.60	690.60	45	7	4.27	2.85	34.17	2073.8	250.83	0.0502	655	846
560	13	646.00	81.60	727.60	54	19	3.90	2.34	35.10	2322.9	301.42	0.0491	665	860
630	13	725.00	91.80	816.80	54	19	4.13	2.48	37.18	2613.4	338.23	0.0438	707	920
630	4	725.00	31.30	756.30	72	7	3.58	2.39	35.81	2210.5	256.51	0.0452	701	909
710	13	817.00	104.00	921.00	54	19	4.39	2.63	39.49	2945.6	381.50	0.0388	754	986
710	4	817.00	35.30	852.30	72	7	3.80	2.53	37.99	2491.3	288.75	0.0401	746	973
800	4	921.00	39.80	960.80	72	7	4.04	2.69	40.39	2807.1	326.38	0.0356	794	1041
800	8	921.00	76.70	997.70	84	7	3.74	3.74	41.14	3053.2	372.20	0.0350	803	1055
900	4	1036.00	44.80	1080.80	72	7	4.28	2.85	42.79	3158.0	366.32	0.0316	843	1112
900	8	1036.00	86.30	1122.30	84	7	3.96	3.96	43.56	3435.3	417.28	0.0312	851	1125
1000	8	1151.00	93.70	1244.70	84	19	4.18	2.51	45.99	3804.1	467.91	0.0281	896	1193
1120	8	1289.00	105.00	1394.00	84	19	4.42	2.65	48.61	4242.9	522.74	0.0251	946	1267

NOTE :

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

Customized conductor sizes based on customer's requirement can also be designed.

ALL ALUMINUM ALLOY CONDUCTOR, ALUMINUM CLAD STEEL REINFORCED (AACSR/AW): IEC 61089/EN 50182 - Type A3/20SA

Code Number	Steel Ratio	Sectional Area			Stranding				Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @ 20°C	Current Capacity	
					No. of Wires		Wire diameter						@ 75°C	@ 85°C
		Alloy	Steel	Total	Aluminum	Steel	Aluminum	Steel						
-	%	(mm ²)	(mm ²)	(mm ²)	(No.)	(No.)	(mm)	(mm)	(mm)	(Kg/Km)	KN	(Ω/Km)	(Ampere)	(Ampere)
16	17	18.60	3.10	21.70	6	1	1.99	1.99	5.97	71.4	10.35	1.7448	79	94
25	17	29.00	4.84	33.84	6	1	2.48	2.48	7.44	111.5	16.01	1.1190	104	124
40	17	46.50	7.75	54.25	6	1	3.14	3.14	9.42	178.5	25.42	0.6979	137	165
63	17	73.20	12.20	85.40	6	1	3.94	3.94	11.82	281.1	38.92	0.4433	180	218
100	6	116.00	6.46	122.46	18	1	2.87	2.87	14.35	362.2	46.49	0.2824	249	304
125	6	145.00	8.07	153.07	18	1	3.21	3.21	16.05	452.7	57.86	0.2259	284	349
125	16	145.00	23.70	168.70	26	7	2.67	2.07	16.89	557.1	80.07	0.2176	292	359
160	6	186.00	10.30	196.30	18	1	3.63	3.63	18.15	579.5	71.98	0.1761	328	405
160	7	186.00	13.30	199.30	26	7	3.02	2.35	19.13	733.5	78.54	0.1755	331	410
200	6	232.00	12.90	244.90	18	1	4.05	4.05	20.25	724.5	89.85	0.1412	372	463
200	16	232.00	37.80	269.80	26	7	3.37	2.62	21.34	891.5	124.49	0.1360	382	477
250	10	290.00	28.50	318.50	22	7	4.10	2.28	23.24	989.1	130.97	0.1113	428	536
250	16	290.00	47.30	337.30	26	7	3.77	2.93	23.87	1114.4	155.68	0.1088	434	545
315	16	366.00	59.60	425.60	26	7	4.23	3.29	26.79	1404.1	194.56	0.0862	495	627
315	7	366.00	25.30	391.30	45	7	3.22	2.15	25.77	1177.7	154.12	0.0893	477	603
400	7	465.00	32.10	497.10	45	7	3.63	2.42	29.04	1495.5	190.13	0.0703	546	695
400	13	465.00	60.20	525.20	54	7	3.31	3.31	29.79	1683.0	231.19	0.0688	554	706
450	7	523.00	36.10	559.10	45	7	3.85	2.56	30.78	1682.5	213.84	0.0625	582	744
450	13	523.00	67.80	590.80	54	7	3.51	3.51	31.59	1893.2	254.92	0.0612	590	757
500	7	581.00	40.20	621.20	45	7	4.05	2.70	32.40	1869.3	237.69	0.0563	616	791
500	13	581.00	75.30	656.30	54	7	3.70	3.70	33.30	2103.6	280.91	0.0551	625	805
560	7	651.00	45.00	696.00	45	7	4.29	2.86	34.32	2093.6	266.27	0.0502	656	846
560	13	651.00	82.40	733.40	54	19	3.92	2.35	35.27	2345.2	317.13	0.0492	665	860
630	13	732.00	92.70	824.70	54	19	4.15	2.49	37.35	2638.3	356.65	0.0438	708	920
630	4	732.00	31.60	763.60	72	7	3.60	2.40	36.00	2231.6	273.56	0.0451	702	910
710	13	825.00	104.00	929.00	54	19	4.41	2.65	39.71	2973.9	401.32	0.0388	754	987
710	4	825.00	35.60	860.60	72	7	3.82	2.55	38.21	2515.1	308.29	0.0401	747	974
800	4	930.00	40.20	970.20	72	7	4.05	2.70	40.50	2833.8	347.62	0.0355	795	1043
800	8	930.00	77.50	1007.50	84	7	3.75	3.75	41.25	3082.5	393.70	0.0350	803	1056
900	4	1046.00	45.20	1091.20	72	7	4.30	2.87	43.01	3188.0	390.96	0.0316	843	1113
900	8	1046.00	87.10	1133.10	84	7	3.98	3.98	43.78	3467.9	442.72	0.0311	853	1128
1000	8	1162.00	94.60	1256.60	84	19	4.20	2.52	46.20	3840.7	494.69	0.0281	897	1194
1120	8	1301.00	106.00	1407.00	84	19	4.44	2.66	48.82	4301.5	553.98	0.0251	946	1268

NOTE :

 Current capacity based on referenced 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

Customized conductor sizes based on customer's requirement can also be designed.