Overview

The IEC 61089 standard for ACSR represents a significant advancement in the realm of electrical transmission, setting a new benchmark for quality and performance. This standard governs the construction and performance specifications for aluminum conductor steel-reinforced cables, commonly referred to as ACSR cables. Notably, ACSR cables stand out for their remarkable versatility, rendering them an optimal choice for a diverse array of applications.

Application

ACSR cables find widespread use in overhead transmission and distribution systems, including high-voltage power lines where superior conductivity and strength are imperative for reliable performance.

Advantage

Renowned for their optimal strength and versatility in line design, ACSR cables feature variable stranding steel cores, allowing for tailored strength levels without compromising on ampacity. Beyond their mechanical robustness, ACSR cables exhibit impressive electrical conductivity and corrosion resistance. Engineered to withstand high temperatures without distortion, these cables ensure consistent and efficient power transmission even under demanding operating conditions.

Construction

The construction of ACSR cables represents a symbiotic blend of aluminum and steel, with aluminum strands comprising the outer layer and steel strands forming the core. This ingenious design achieves a remarkable strength-to-weight ratio, rendering ACSR cables well-suited for deployment in challenging environments and across extensive spans.

Specification

-IEC 61089 Standard Aluminum Conductor Steel Reinforced

Eastful Cable Lab

We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.
CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rhineland and CCS.

National Green Factory

Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.
We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

Technical Parameters

Nominal Cross Section Area	Cross Section Area			Number of Stranding Wires		Nominal Dia. of Single Wire		Nominal Diameter		Nominal Weight	Rated Strength	Max.D.C. Resistance at 20℃
	Alum.	Steel	Total	Al.	St.	Alum.	Steel	Alum.	Steel			
mm²	mm²	mm²	mm²	No.	No.	mm	mm	mm	mm	kg/km	kN	Ω/Km
16	16	2.67	18.7	6	1	1.84	1.84	1.84	5.53	64.6	6.08	1.7934
25	25	4.17	29.2	6	1	2.30	2.30	2.30	6.91	100.9	9.13	1.1478
40	40	6.67	46.7	6	1	2.91	2.91	2.91	8.74	161.5	14.40	0.7174
63	63	10.5	73.5	6	1	3.66	3.66	3.66	11.0	254.4	21.63	0.4555
100	100	16.7	117	6	1	4.61	4.61	4.61	13.8	403.8	34.30	0.2869
125	125	6.94	132	18	1	2.97	2.97	2.97	14.9	397.9	29.17	0.2304
125	125	20.4	145	26	7	2.47	1.92	5.88	15.7	503.9	45.69	0.2310
160	160	8.89	169	18	1	3.36	3.36	3.36	16.8	509.3	36.18	0.1800
160	160	26.1	186	26	7	2.80	2.18	6.53	17.7	644.9	57.69	0.1805
200	200	11.1	211	22	7	3.76	3.76	3.76	18.8	636.7	44.22	0.1440
200	200	32.6	233	26	7	3.13	2.43	7.30	19.8	806.2	70.13	0.1444
250	250	24.6	275	45	7	3.80	2.11	6.34	21.6	880.6	68.72	0.1154
250	250	40.7	291	26	7	3.50	2.72	8.16	22.2	1007.7	87.67	0.1155
315	315	21.8	337	45	7	2.99	1.99	5.97	23.9	1039.3	79.03	0.0917
315	315	51.3	366	26	7	3.93	3.05	9.16	24.9	1269.7	106.83	0.0917
400	400	27.7	428	45	7	3.36	2.24	6.73	26.9	1320.1	98.36	0.0722
400	400	51.9	452	54	7	3.07	3.07	9.21	27.6	1510.3	132.04	0.0723
450	450	31.1	481	45	7	3.57	2.38	7.14	28.5	1485.2	107.47	0.0642
450	450	58.3	508	54	7	3.26	3.26	9.77	29.3	1699.1	138.42	0.0643
500	500	34.6	535	45	7	3.76	2.51	7.52	30.1	1650.2	199.41	0.0578
500	500	64.8	565	54	7	3.43	3.43	10.3	30.9	1887.9	153.80	0.0578
560	560	38.7	599	45	7	3.98	2.65	7.96	31.8	1848.2	133.74	0.0516
560	560	70.9	631	54	19	3.63	2.18	10.9	32.7	2103.4	172.59	0.0516
630	630	43.6	674	45	7	4.22	2.81	8.44	33.8	2079.2	150.45	0.0459
630	630	79.8	710	54	19	3.85	2.31	11.6	34.7	2366.3	191.77	0.0459
710	710	49.1	759	45	7	4.48	2.99	8.96	35.9	2343.2	169.56	0.0407
710	710	89.9	800	54	19	4.09	2.45	12.3	36.8	2666.8	216.12	0.0407
800	800	34.6	835	72	7	3.76	2.51	7.52	37.6	2480.2	167.41	0.0361
800	800	66.7	867	84	7	3.48	3.48	10.4	38.3	2732.7	205.33	0.0362
800	800	101	901	54	19	4.44	2.61	13.0	39.1	3004.9	243.52	0.0362
900	900	38.9	939	72	7	3.99	2.66	7.98	39.9	2790.2	188.33	0.0321
900	900	75.0	975	84	7	3.69	3.69	11.1	40.6	3074.2	226.50	0.0322
1000	1000	43.2	1043	72	7	4.21	2.80	8.41	42.1	3100.3	209.26	0.0289
1120	1120	47.3	1167	72	19	4.45	1.78	8.90	44.5	3464.9	234.53	0.0258
1120	1120	91.2	1211	84	19	4.12	2.47	12.4	45.3	3811.5	283.17	0.0258
1250	1250	102	1352	84	19	4.35	2.61	13.1	47.9	4253.9	316.04	0.0232
1250	1250	52.8	1303	72	19	4.70	1.88	9.40	47.0	3867.1	261.75	0.0231

Technical Parameters

Nominal Corss Section Area	Cross Section Area			Number of Stranding Wires		Nominal Dia. of Single Wire		Nominal Diameter		Nominal Weight	Rated Strength	Max.D.C. Resistance at 20℃
	Alum.	Steel	Total	Al.	St.	Alum.	Steel	Alum.	Steel			
mm²	mm²	mm²	mm²	No.	No.	mm	mm	mm	mm	kg/km	kN	Ω/Km
16	16	2.67	18.7	6	1	1.84	1.84	1.84	5.53	64.6	6.45	1.7934
25	25	4.17	29.2	6	1	2.30	2.30	2.30	6.91	100.9	9.71	1.1478
40	40	6.67	46.7	6	1	2.91	2.91	2.91	8.74	161.5	15.33	0.7174
63	63	10.5	73.5	6	1	3.66	3.66	3.66	11.0	254.4	22.37	0.4555
100	100	16.7	117	6	1	4.61	4.61	4.61	13.8	403.8	35.50	0.2869
125	125	6.94	132	18	1	2.97	2.97	2.97	14.9	397.9	30.14	0.2304
125	125	20.4	145	26	7	2.47	1.92	5.77	15.7	503.9	48.54	0.2310
160	160	8.89	169	18	1	3.36	3.36	3.36	16.8	509.3	37.42	0.1800
160	160	26.1	186	26	7	2.80	2.18	6.53	17.7	644.9	61.34	0.1805
200	200	11.1	211	18	1	3.76	3.76	3.76	18.8	636.7	45.00	0.1440
200	200	32.6	233	26	7	3.13	2.43	7.30	19.8	806.2	74.69	0.1444
250	250	24.6	275	45	7	3.80	2.11	6.34	21.6	880.6	72.16	0.1154
250	250	40.7	291	26	7	3.50	2.71	8.16	22.2	1007.7	93.37	0.1155
315	315	21.8	337	45	7	2.99	1.99	5.79	23.9	1039.3	82.08	0.0917
315	315	51.3	366	26	7	3.93	3.05	9.16	24.9	1269.7	114.02	0.0917
400	400	27.7	428	45	7	3.36	2.24	6.73	26.9	1320.1	102.23	0.0722
400	400	51.9	452	54	7	3.07	3.07	9.21	27.6	1510.3	130.30	0.0723
450	450	31.1	481	45	7	3.57	2.38	7.14	28.5	1485.2	111.82	0.0642
450	450	58.3	508	54	7	3.26	3.26	9.77	29.3	1699.1	146.58	0.0643
500	500	34.6	535	45	7	3.76	2.51	7.52	30.1	1650.2	124.25	0.0578
500	500	64.8	565	54	7	3.43	3.43	10.3	30.9	1887.9	162.87	0.0578
560	560	38.7	599	45	7	3.98	2.65	7.96	31.8	1848.2	139.16	0.0516
560	560	70.9	631	54	19	3.63	2.18	10.9	32.7	2103.4	182.52	0.0516
630	630	43.6	674	45	7	4.22	2.81	8.44	33.8	2079.2	156.55	0.0459
630	630	79.8	710	54	19	3.85	2.31	11.6	34.7	2366.3	202.94	0.0459
710	710	49.1	759	45	7	4.48	2.99	8.96	35.9	2343.2	176.43	0.0407
710	710	89.9	800	54	19	4.09	2.45	12.3	36.8	2666.8	228.71	0.0407
800	800	34.6	835	72	7	3.76	2.51	7.52	37.6	2480.2	172.25	0.0361
800	800	66.7	867	84	7	3.48	3.48	10.4	38.3	2732.7	214.67	0.0362
800	800	101	901	54	19	4.34	2.61	13.0	39.1	3004.9	257.71	0.0362
900	900	38.9	939	72	7	3.99	2.66	7.98	39.9	2790.2	193.78	0.0321
900	900	75.0	975	84	7	3.69	3.69	11.1	40.6	3074.2	231.75	0.0322
1000	1000	43.2	1043	72	7	4.21	2.80	8.41	42.1	3100.3	215.31	0.0289
1120	1120	47.3	1167	72	19	4.45	1.78	8.90	44.5	3464.9	241.15	0.0258
1120	1120	91.2	1211	84	19	4.12	2.47	12.4	45.3	3811.5	295.94	0.0258
1250	1250	52.8	1303	72	19	4.70	1.88	94.0	47.0	3867.1	269.14	0.0231
1250	1250	102	1352	84	19	4.35	2.61	13.10	47.9	4253.9	330.29	0.0232

Technical Parameters

Nominal Corss Section Area	Cross Section Area			Number of Stranding Wires		Nominal Dia. of Single Wire		Nominal Diameter		Nominal Weight	Rated Strength	Max.D.C. Resistance at 20℃
	Alum.	Steel	Total	Al.	St.	Alum.	Steel	Alum.	Steel			
mm²	mm²	mm²	mm²	No.	No.	mm	mm	mm	mm	kg/km	kN	Ω/Km
16	16	2.67	18.7	6	1	1.84	1.84	1.84	5.53	64.6	6.83	1.7934
25	25	4.17	29.2	6	1	2.30	2.30	2.30	6.91	100.9	10.25	1.1478
40	40	6.67	46.7	6	1	2.91	2.91	2.91	8.74	161.5	16.20	0.7174
63	63	10.5	73.5	6	1	3.66	3.66	3.66	11.0	254.4	24.15	0.4555
100	100	16.7	117	6	1	4.61	4.61	4.61	13.8	403.8	38.33	0.2869
125	125	6.94	132	18	1	2.97	2.97	2.97	14.9	397.9	30.14	0.2304
125	125	20.4	145	26	7	2.47	1.92	5.77	15.7	503.9	51.39	0.2310
160	160	8.89	169	18	1	3.36	3.36	3.36	16.8	509.3	38.67	0.1800
160	160	26.1	186	26	7	2.80	2.18	6.53	17.7	644.9	64.99	0.1805
200	200	11.1	211	18	1	3.76	3.76	3.76	18.8	636.7	46.89	0.1440
200	200	32.6	233	26	7	3.13	2.43	7.30	19.8	806.2	78.93	0.1444
250	250	24.6	275	22	7	3.80	2.11	6.34	21.6	880.6	75.60	0.1154
250	250	40.7	291	26	7	3.50	2.71	8.16	22.2	1007.7	98.66	0.1155
315	315	21.8	337	45	7	2.99	1.99	5.79	23.9	1039.3	85.13	0.0917
315	315	51.3	366	26	7	3.93	3.05	9.16	24.9	1269.7	121.20	0.0917
400	400	27.7	428	45	7	3.36	2.24	6.73	26.9	1320.1	106.10	0.0722
400	400	51.9	452	54	7	3.07	3.07	9.21	27.6	1510.3	137.56	0.0723
450	450	31.1	481	45	7	3.57	2.38	7.14	28.5	1485.2	115.87	0.0642
450	450	58.3	508	54	7	3.26	3.26	9.77	29.3	1699.1	154.75	0.0643
500	500	34.6	535	45	7	3.76	2.51	7.52	30.1	1650.2	128.74	0.0578
500	500	64.8	565	54	7	3.43	3.43	10.3	30.9	1887.9	171.94	0.0578
560	560	38.7	599	45	7	3.98	2.65	7.96	31.8	1848.2	144.19	0.0516
560	560	70.9	631	54	19	3.63	2.18	10.9	32.7	2103.4	192.45	0.0516
630	630	43.6	674	45	7	4.22	2.81	8.44	33.8	2079.2	162.21	0.0459
630	630	79.8	710	54	19	3.85	2.31	11.6	34.7	2366.3	213.31	0.0459
710	710	49.1	759	45	7	4.48	2.99	8.96	35.9	2343.2	182.81	0.0407
710	710	89.9	800	54	19	4.09	2.45	12.3	36.8	2666.8	240.41	0.0407
800	800	34.6	835	72	7	3.76	2.51	7.52	37.6	2480.2	176.74	0.0361
800	800	66.7	867	84	7	3.48	3.48	10.4	38.3	2732.7	224.00	0.0362
800	800	101	901	54	19	4.34	2.61	13.0	39.1	3004.9	270.88	0.0362
900	900	38.9	939	72	7	3.99	2.66	7.98	39.9	2790.2	198.83	0.0321
900	900	75.0	975	84	7	3.69	3.69	11.1	40.6	3074.2	244.50	0.0322
1000	1000	43.2	1043	72	7	4.21	2.80	8.41	42.1	3100.3	220.90	0.0289
1120	1120	47.3	1167	72	19	4.45	1.78	8.90	44.5	3464.9	247.77	0.0258
1120	1120	91.2	1211	84	19	4.12	2.47	12.4	45.3	3811.5	307.79	0.0258
1250	1250	52.8	1303	72	19	4.70	1.88	94.0	47.0	3867.1	276.53	0.0231
1250	1250	102	1352	84	19	4.35	2.61	13.1	47.9	4253.9	343.52	0.0232