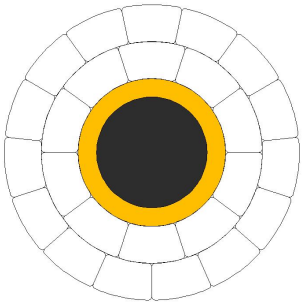
Aluminum Conductor Carbon Composite Conductor

APPLICATION:

Aluminum Conductor Carbon Composite Core Conductors : These are "High-temperature low-sag" (HTLS) Conductors with excellent electrical characteristics, excellent sagtension characteristics and superior corrosion resistance to that of ACSR. As compared to ACSR they have lighter weight, comparable strength and current carrying capacity, lower electrical losses and superior corrosion resistance have given this conductor wide acceptance as a transmission conductor.



STANDARDS:

- IEC 61089

Qualification Certificate:

For more information, please visit our website:

https://www.huilicablegroup.com/htls-conductor-stacir-awinvaracss-twgztacsrcarbon-fiber-core-conductor.html

CONSTRUCTION:

- 63%IACS Annealed Aluminium Wire & Super Thermal Resistant Aluminium Alloy Wire.
- Carbon Composite Core.

TECHNICAL PARAMETERS:

Aluminum Conductor Carbon Composite Core Conductor

Code	Cross-Sectional Area			Diameter		Weight	Rated Strength	DC Resistance 20℃	Current Capacity	
	AL	Core	Total	Conductor	Core	Total	Conductor		85℃	180℃
	mm²	mm²	mm²	mm	mm	Kg/Km	KN	Ω/Km	A	A
SILVASSA	122.70	28.00	150.70	14.35	5.97	392.00	66.50	0.2286	335	632
HELSINKI	150.60	28.00	178.60	15.65	5.97	469.00	68.10	0.1862	378	719
JAIPUR	155.70	47.10	202.80	16.51	7.75	522.00	109.80	0.1801	389	742
ZADAR	177.40	39.70	217.10	17.09	7.11	564.00	95.00	0.1576	419	802
ROVINJ	187.80	28.00	215.80	17.09	5.97	575.00	70.20	0.1487	431	825
COPENHAGEN	219.90	28.00	247.90	18.29	5.97	659.00	72.00	0.1272	473	910
REYKJAVIK	223.10	39.70	262.80	18.82	7.11	692.00	97.50	0.1256	479	924
MONTECARLO	228.50	87.30	315.80	20.78	10.54	798.00	198.80	0.1230	494	962
GLASGOW	236.70	47.10	283.80	19.53	7.75	743.00	114.30	0.1184	497	962
GDANSK	248.80	28.00	276.80	19.20	5.97	741.00	73.60	0.1126	507	981
CASABLANCA	273.60	39.70	313.30	20.50	7.11	832.00	100.40	0.1024	539	1050
OSLO	313.80	60.30	374.10	22.40	8.76	981.00	146.70	0.0893	588	1154
LISBON	315.50	39.70	355.20	21.79	7.11	946.00	102.70	0.0887	587	1148
AMSTERDAM	367.40	47.10	414.50	23.55	7.75	1104.00	121.70	0.0762	643	1267
25MM	383.20	87.30	470.50	24.99	10.54	1222.00	207.30	0.0730	665	1319
CORDOBA	399.40	47.10	446.50	24.41	7.75	1191.00	123.50	0.0700	675	1336
LEIPZIG	406.40	71.30	477.70	25.15	9.53	1258.00	174.60	0.0690	684	1358
BRUSSELS	421.40	51.90	473.30	25.15	8.13	1264.00	134.50	0.0666	696	1382
STOCKHOLM	453.70	60.30	514.00	26.39	8.76	1368.00	154.50	0.0617	730	1457
STOCKHOLM	463.30	60.30	523.60	26.39	8.76	1395.00	155.10	0.0605	737	1471
WARSAW	507.50	60.30	567.80	27.71	8.76	1519.00	157.60	0.0553	778	1561
DUBLIN	524.50	71.30	595.80	28.14	9.53	1584.00	181.20	0.0534	794	1596
KOLKATA	543.50	71.30	614.80	28.63	9.53	1644.00	182.30	0.0517	809	1630
MAHAKAM	544.90	87.30	632.20	29.01	10.54	1669.00	216.50	0.0514	814	1642
HAMBURG	546.40	60.30	606.70	28.63	8.76	1627.00	159.70	0.0514	811	1634
MILAN	567.70	60.30	628.00	29.11	8.76	1686.00	160.90	0.0494	830	1675
ROME	592.50	71.30	663.80	29.90	9.53	1775.00	185.00	0.0474	851	1724
VIENNA	629.20	60.30	689.50	30.43	8.76	1852.00	164.40	0.0445	880	1787
BUDAPEST	668.30	71.30	739.60	31.50	9.53	1984.00	189.30	0.0420	912	1859
MUMBAI	685.40	71.30	756.70	31.78	9.53	2036.00	190.30	0.0410	924	1886

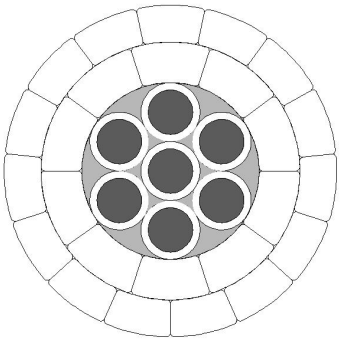
NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

Invar Conductor (STACIR/AW)

Super Thermal-Resistant Aluminum-Alloy Conductors, Aluminum-Clad Invar Reinforced

APPLICATION:

Invar Conductor (STACIR/AW) are high ampacity conductors with inner core composed of Aluminum clad Invar core & outer layer composed of Super Thermal Resistant Aluminium alloy with round or trapezoidal shaped wires.These can operate upto 210°C ,Can carry 100~150% more current as that of ACSR of the same size.For uprating lines, no modifications or reinforcement is required to the existing towers.



STANDARDS:

- ASTM B-779
- IEC 61089/IEC 62004

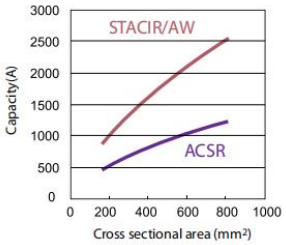
Qualification Certificate:

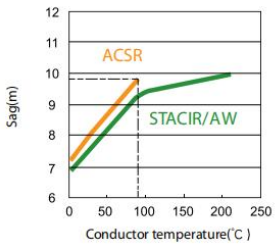
For more information, please visit our website:

https://www.huilicablegroup.com/htls-conductor-stacir-awinvaracss-twgztacsrcarbon-fiber-core-conductor.html

CONSTRUCTION:

- Super Thermal Resistant Aluminium Alloy Wire(Type-AT3 & NRLH3).
- Aluminum Clad Invar Core(LBY10 & LBY14).
- Anti-Corrosion Grease





TECHNICAL PARAMETERS:

Super Thermal-Resistant Aluminum-Alloy Conductors, Aluminum-Clad Invar Reinforced (STACIR/AW)

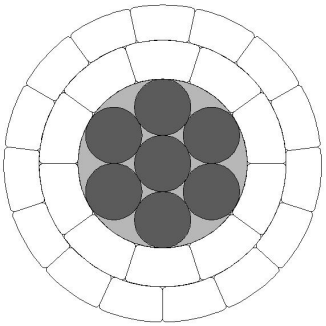
Code	Structure		Areas	Diameter	Breaking load	DC resistance at 20℃	Weight	Current capacity	
	STRA-Alloy	Invar						STACIR	STACIR/AW
	Nos./mm		mm²	mm	kN	Ω/km	Kg/km	A	
160/40	18/3.37	7/2.65	199.16	17.04	65.06	0.1759	730	771	957
200/45	17/3.87	7/2.85	244.62	18.87	76.87	0.1412	883	890	1105
200/50	17/3.87	7/2.95	247.81	19.01	80.39	0.1409	906	892	1110
250/45	18/4.20	7/2.85	294.04	20.64	8264	0.1141	1019	1017	1268
250/40	18/4.13	7/2.75	290.96	20.51	81.12	0.1143	996	1014	1264
240/55	18/4.13	7/3.20	297.43	20.82	93.12	0.1169	1083	1007	1138
240/50	18/4.71	7/3.00	290.62	20.55	88.13	0.1157	1032	1000	1131
315/55	18/4.71	7/3.20	396.92	23.15	104.06	0.0907	1266	1182	1479
315/50	18/4.71	7/3.00	363.10	22.91	97.20	0.0910	1232	1176	1471
330/60	18/4.81	7/3.30	386.95	23.68	109.70	0.0869	1329	1216	1522
350/55	20/4.71	7/3.20	404.77	24.19	109.33	0.0819	1379	1262	1580

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.

Annealed Aluminum Conductor Steel Reinforced (ACSS/TW)

APPLICATION:

ACSS/TW conductor is composed of steel core and annealed aluminum wires. The conductivity of annealed aluminum wire is up to 63%IACS, which is in favor to capacity expansion and energy conservation.The current-carrying capacity of ACSS/TW conductor in 150℃ is 1.5 times that of ACSR with same area in 90℃.



STANDARDS:

- ASTM B-609/851
- IEC 61089/IEC 62219

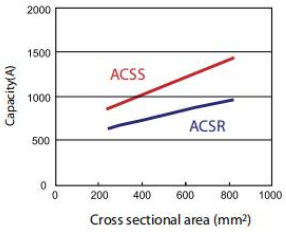
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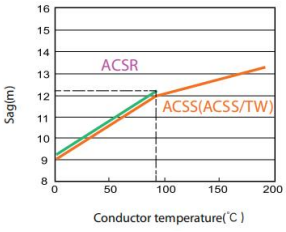
For more information, please visit our website:

https://www.huilicablegroup.com/htls-conductor-stacir-awinvaracss-twgztacsrcarbon-fiber-core-conductor.html

CONSTRUCTION:

- 63%IACS Annealed Aluminium Wire.
- Galvanized Steel Core & Aluminum Clad Steel Core.
- Anti-Corrosion Grease





TECHNICAL PARAMETERS:

Annealed Aluminum Conductor Steel Reinforced(ACSS/TW)

Code	Structure		Areas	Diameter	Breaking load	DC resistance at 20℃	Weight	Current capacity in 150℃
	Al	Steel						
	Nos./mm		mm²	mm	kN	Ω/km	Kg/km	A
150/25	15/3.52	7/2.06	169.30	15.65	49.7	0.1915	585	718
185/30	20/3.45	7/2.33	216.81	17.71	63.6	0.1495	749	844
210/35	20/3.67	7/2.48	245.38	18.84	72.0	0.1321	848	916
240/40	20/3.94	7/2.66	282.74	20.22	82.9	0.1146	977	1005
250/40	26/3.50	7/2.70	290.23	20.49	85.3	0.1118	1004	1022
300/40	26/3.87	7/2.70	345.91	22.33	88.6	0.09141	1158	1161
300/50	26/3.83	7/2.96	347.71	22.42	102.5	0.09333	1203	1151
350/55	20/4.72	7/3.20	406.25	24.24	119.8	0.07988	1406	1275
400/45	24/4.55	7/2.80	433.33	24.96	98.8	0.07160	1413	1358
400/50	21/4.94	7/3.08	454.65	25.60	115.5	0.06943	1520	1391
400/65	23/4.72	7/3.42	466.74	25.98	137.0	0.06946	1613	1397
500/50	36/4.19	7/3.00	545.87	27.99	116.2	0.05657	1763	1584
500/65	36/4.20	7/3.44	563.82	28.50	143.9	0.05638	1894	1597
630/65	36/4.76	7/3.44	705.69	31.83	152.1	0.04383	2285	1873

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.