



ZHONGTIAN TECHNOLOGY CO., LTD.

SHANGHAI ZHONGTIAN ALUMINIUM CO., LTD.

Company Profile



Shanghai Zhongtian Aluminum Co., Ltd is the subsidiary holding company of ZhongTian Technology (hereinafter called ZTT) who purchased the virtual assets from Shanghai Aluminum Factory. It is registered in Shanghai Xinzhuang Industrial Area.

The company concentrates on the development and production of big cross section and big length steel core aluminum stranded wire, high strength aluminum alloy

conductors, Thermal-resistant aluminum alloy conductors and series products etc. The products have passed the whole testing of National Electric Wire and Cable Testing Center and attained the international advanced level. It has passed the identification of two Ministries in May of 2001.

ZTT is a public company of China Communication Industry (Stock code: 600522). ZTT mainly produces products for optical communication; it is a professional manufacturer which produces the most comprehensive series of fiber optic and electric cables in china. It's composite strength has been evaluated 20 strong in China Communication Industry, one of the ten name brand of the most competitive fiber optic and electric cables in china, top 100 Chinese electric Information Enterprises, the quantity of products free of national checking, civilized company in Jiangsu province etc.

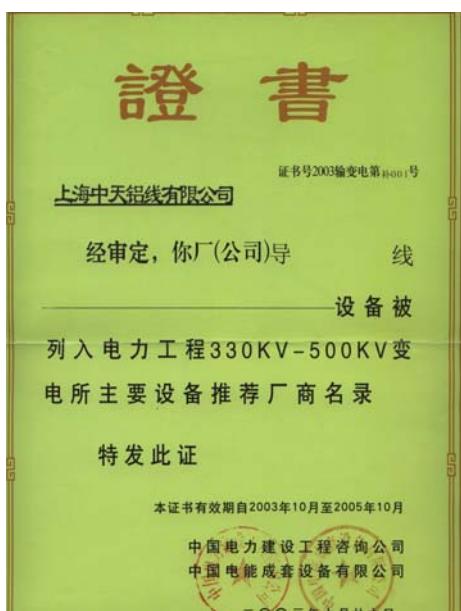
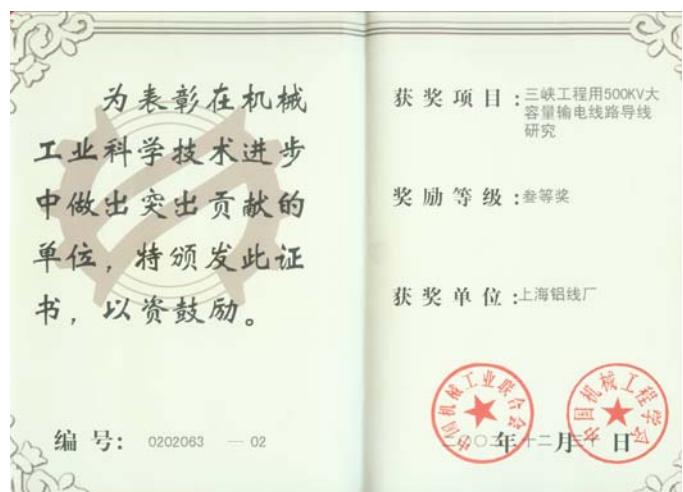
While for the special business on cables, ZTT also has set foot in electric power, investment, real estate, and hotel and so on. It has 15 subsidiary companies. The group has formed a multi-developing structure of Shanghai Headquarter, Nantong Research Center, Rudong Garden Factory, and has an exclusive business pattern in common cables, special cables, micro-cables, soft cables, electric power cables, overseas departments.

Shanghai Zhongtian Aluminum Co., Ltd has international topping product facilities and perfect system of guaranteed quality, all kinds of conductors including big cross section aluminum alloy conductors, heat-proof conductors have been mass applied in internal stress projects. We have supplied every variety leads with 80 thousands tons for 500KV line as yet, exported about 20 thousands tons to Australia, New Zealand etc, and widely commended by customers.

Shanghai Zhongtian Aluminum Co., Ltd will consider customer first, quality based, keep innovation as the tenet, strict manage according to ISO9001:2000 systems of quality managements and requests, win the market by excellent product quality, fine services and honest credits. We will provide the most excellent products and finest services to spacious users.



Certificates

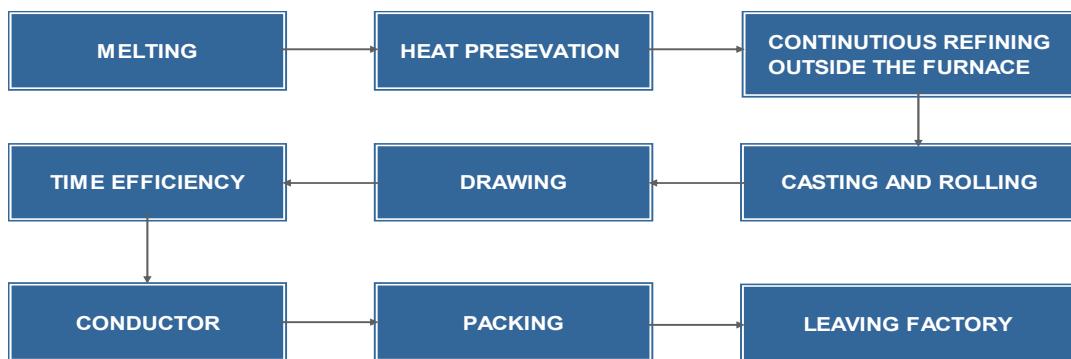


Supply Record and Typical Project



- ◆ Provide 1500 ton 720/50 large section ACSR wire for Shanxia Project. (First operating on the net in our country)
- ◆ Supply 1000 ton of 60%IACS Thermal -resistance ACSR conductor for Beijing Power Company on Beitong, Libei, Huhuang, Junhuang, Nansu, Fuxia, Huaimi, Shuikou Line.
- ◆ Supply more than 1000 ton 60%IACS Heat-resistance ACSR conductor for Huadong Power Grid, Yunnan Power Grid, Guangxi Power Grid, Fujian Power, and Tianjin Power.
- ◆ Supply 400 ton 720/90 large reel length, large section and high strength ACSR conductor for Shenzhen Qianwan Generating Station.
- ◆ Provide High-strength ACSR conductor for Guangxi Power Grid 500kV transform~Wanxiu 220kV large span project.
- ◆ Supply 3000ton different types of AA wire for OPGW Manufacturer.
- ◆ Supply 200 ton AA conductor for Liyujiang-Shaoguan 550kV Line.
- ◆ Supply 200 ton ACSR conductor for Anhui Power Transform Project.
- ◆ Export 20 thousand ton of different types of especial conductor.

Producing Flow and Features



Features of Main Production Equipment of Zhongtian Aluminum Wire Co., Ltd

- ◆ Slant maintaining furnace replaces original open furnace to guarantee that al-alloy liquid in the furnace can be toppled completely when the furnace is opened every time. Therefore, every batch can have chemical element with satisfying effect.
- ◆ The four-wheel conticaster replaces two-wheel type to make casting ingots leave the casting wheel without torsion and guarantee that they are flat and straight without deflection when they are entering the rolling mill. Casting ingots cooling is equal because cooling system of casting wheel adopts four-side cooling.
- ◆ New roller type disposal replaces previous unified Y-shape structure to make al-alloy rod deform completely and have good performance.
- ◆ Quick heating device is added to make high strength al-alloy casting ingots keep constant temperature when they are entering the rolling mill.
- ◆ Add temperature measurement and display device on the front and back sides of rolling mill to guarantee casting ingots keep best condition during rolling. Good device for taking up wires to make aluminum pole coiled evenly to create the conditions for next procedure.
- ◆ Imported continuous refining degasification device is adopted. During aluminum (al-alloy) rod production, purification and degasification is required to exclude the harmful hydrogen. Generally, fusing agent purification is adopted. This degasification method is not thoroughgoing. Now imported continuous purification and degasification device is added. After fusing agent purification, some gas enters through continuous refining device outside the furnace, such as nitrogen and chlorine, etc. Hydrogen is excluded to improve aluminum (al-alloy) rod's quality.
- ◆ Imported continuous high speed large drawing machine is adopted. It loads and offloads the drum full-automatically to make aluminum (al-alloy) has no torsion when it is drawn.
- ◆ Imported continuous aging hearth is adopted. This hearth has hearth temperature control system with extreme high precision. Full-automatic mechanical hand is adopted to load and offload materials. Hearth temperature is displayed automatically. It has automatic alarm function and can be randomly adjusted.
- ◆ Stranding machine adopts frame stranding machine loading and offloading the drum full-automatically to control constant tension automatically, add pretension and guarantee the stranded wire's quality.

Producing Equipments



Time Efficiency Furnace (Germany)



Drawing Machine (Germany)



Refined Equipments with
Removing Gas On-conductor
(France)



Casing Stranded Machine



Successive Casting and Rolling Mill Group

No.	Names of main production tools and equipments	Manufacturer	Quantity
1	LGZ1500Y successive casting and rolling mill group	Sichuan	1
2	Online gas removal refine device	France	1
3	Slant maintaining furnace	china	2
4	M85 High-speed wire draw bench	Germany	1
5	High-speed wire draw bench		
6	JLC16-003-0-0A0X aging furnace	Germany	1
7	LJK-630/6+12+18+24 fully automatic up & down drums and frame type stranding machine	China	1
8	10-ton two-beam crane	Shanghai	1

Mainly Test Equipments



Chemical Analysis



Torsion and Wrapping Tester



Tension Tester



MA Metal Analyzer (Switzerland)

Mainly Test Equipments

No.	Main Test Equipments	Test Range	Quantity	Measurable Items
1	Tension tester	0.5-5ton	2	Resist tensile intensity, Extend Rate, 1% Extend Stress
2	Bending tester		1	Bending test
3	Torsion tester		1	Torsion test
4	Wire flexing torsion tester	Φ1.0-6.0mm	1	Roll test, Zinc layer adhesion test
5	DC bridge	10-7-10KΩ	1	DC Resistance Rate
6	TG328A Analytic balance	200g	2	Zinc layer weight, analyze aluminum element
7	Raster spectrophotometer		2	Analyze aluminum element
8	Butterfly extensometer	100mm	1	1% Extend Stress
9	Photoelectric colorimeter		1	Furnace Analyze
10	QJ44 portable DC Double bridge	10-5-11KΩ	1	Conductor Current

Performance of Wire Material



Mechanical Performance of Galvanized Steel Wire for Overhead Stranded Wire

Class of strength	Nominal diameter mm		Tensile strength ≥Mpa		Stress of 1% elongation ≥ Mpa		Elongation rate ≥		Twist test ≥		Core rod diameter in bending test(**) (mm)	
	>	≤	A	B	A	B	A	B	A	B	A	B
Strength	1.24	2.25	1340	1240	1170	1100	3.0	4.0	18		1D	1D
	2.25	2.75	1310	1210	1140	1070	3.0	4.0	16		1D	1D
	2.75	3.00	1310	1210	1100	1070	3.5	4.0	16		1D	1D
	3.00	3.50	1290	1190	1100	1000	3.5	4.0	14		1D	1D
	3.50	4.25	1290	1190	1100	1000	4.0	4.0	12		1D	1D
	4.25	4.75	1290	1190	1100	1000	4.0	4.0	12		1D	1D
	4.75	5.50	1290	1190	1100	1000	4.0	4.0	12		1D	1D
High strength	1.24	2.25	1450	1380	1310	1240	2.5	2.5	16		3D	3D
	2.25	2.75	1410	1340	1280	1210	2.5	2.5	16		3D	3D
	2.75	3.00	1410	1340	1280	1210	3.0	3.0	16		4D	4D
	3.00	3.50	1410	1340	1240	1170	3.0	3.0	14		4D	4D
	3.50	4.25	1380	1280	1170	1100	3.0	3.0	12		4D	4D
	4.25	4.75	1380	1280	1170	1100	3.0	3.0	12		4D	4D
	4.75	5.50	1380	1280	1170	1100	3.0	3.0	12		4D	4D
Especially high strength	1.24	2.25	1620		1450		2.0		14		4D	
	2.25	2.75	1590		1410		2.0		14		4D	
	2.75	3.00	1590		1410		2.5		12		5D	
	3.00	3.50	1550	—	1380	—	2.5	—	12		5D	—
	3.50	4.25	1520		1340		2.5		10		5D	
	4.25	4.75	1520		1340		2.5		10		5D	
	4.75	5.50	1520		1270		2.5		10		5D	

Note:

* The value in the table is the value of 250mm gauge length. The value should be adjusted by formula: 650/ (gauge length +400) .

** The sample length of the twist test is 100 times of steel wire's diameter.

Tensile Strength and Stress of 1% Elongation of Galvanized Steel Wire

Diameter mm	Min. Tensile Strength MPa	Min. stress of 1% elongation MPa
1.24< d≤3.50	1770	1550
3.50< d≤5.50	1700	1500

Performance of Wire Material



Stress of 1% Elongation and Resistivity of Aluminum Clad Steel Wire

Class	Type	Nominal diameter		Min. Tensile Strength MPa	Min. stress of 1% elongation MPa	Max. resistivity at 20°C nΩ · m
		>	≤			
LB14	—	1.24	3.00	1590	1410	123.15
		3.00	3.50	1520	1350	
		3.50	4.10	1450	1280	
		4.10	4.80	1400	1240	
LB20	A	1.24	3.25	1340	1200	84.80
		3.25	3.45	1310	1180	
		3.45	3.65	1270	1140	
		3.65	3.95	1250	1100	
		3.95	4.10	1210	1100	
		4.10	4.40	1180	1070	
		4.40	4.60	1140	1030	
		4.60	4.75	1100	1000	
		4.75	5.50	1070	1000	
	B	1.24	5.50	1320	1100	
LB23	—	2.50	5.00	1220	980	74.96
LB27	—	2.50	5.00	1080	800	63.86
LB30	—	2.50	5.00	880	650	57.47
LB35	—	2.50	5.00	810	590	49.26
LB40	—	2.50	5.00	680	500	43.10

Note:

AS wire of Class LB20、LB27、LB30、LB40 have the same performance requirement with the Class LB1、LB2、LB3、LB4 AS wire in GB/T 17937/1999 Standard.

Mechanical Performance of Heat Resistance Aluminum Alloy Conductor

Nominal Diameter mm	Min. Tensile Strength MPa		
	NRLH 60, NRLH58	GQNRLH55	GQNRLH52.5
≤2.60	169	248	270
2.60< d ≤2.90	166	245	267
2.90< d ≤3.50	162	241	265
3.50< d ≤3.80	162	241	265
3.80< d ≤4.00	159	238	262
4.00< d ≤5.00	159	225	260

Performance of Wire Material



Zinc Layer's Weight of Galvanized Steel Wire

Nominal Diameter mm		Min. weight of zinc layer g/m ²	
>	≤	Class A	Class B
1.24	1.50	185	370
1.50	1.75	200	400
1.75	2.25	215	430
2.25	3.00	230	460
3.00	3.50	245	490
3.50	4.25	260	520
4.25	4.75	275	550
4.75	5.5	290	580

Physical Constant of AS wire

Class	LB14	LB20		LB23	LB27	LB30	LB35	LB40
Type	—	A	B	—	—	—	—	—
Final Modulus of Elasticity (actual measurement) (Gpa)	170	162	15	149	140	132	122	109
Thermal Elongation Coefficient ($K^{-1} \times 10^{-6}$)	12.0	13.0	12.6	12.9	13.4	13.8	14.5	15.5
Temperature coefficient of resistance (α) (1/°C)	0.0034	0.0036	0.0036	0.0036	0.0036	0.0038	0.0039	0.0040

Diameter Tolerance, Mechanical and Electric Performance of Hard Aluminum Wire

Nominal Diameter (mm)		Diameter Tolerance mm	Min. Tensile Strength Mpa		Resistivity (20°C) ≤ n Ω · m
>	≤		Before Stranding	After Stranding	
	1.25	±0.03	200	190	28.264
1.25	1.50	±0.03	195	185	28.264
1.50	1.75	±0.03	190	181	28.264
1.75	2.00	±0.03	185	176	28.264
2.00	2.25	±0.03	180	171	28.264
2.25	2.50	±0.03	175	166	28.264
2.50	3.00	±0.03	170	162	28.264
3.00	3.50	±1%	165	157	28.264
3.50	5.00	±1%	160	152	28.264

Performance of Wire Material



Mechanical and Electric Performance of High Strength Al-alloy Wire

Item	Unit	LHA1	LHA2
Tensile strength ≥	≤3.50mm	Mpa	325
	>3.50mm		315
Elongation rate (250mm) ≥	%	3.0	3.5
Resistivity (20°C) ≤	n Ω. m	32.840	32.530
Density	kg/dm	2.703	2.703
Linear expansion coefficient	1/°C	23×10 ⁻⁶	23×10 ⁻⁶
Resistance temperature coefficient	1/°C	0.0036	0.0036

Standard Increment Caused by Stranding

Stranding structure				Standard increment %		
AL		Steel		Weight		Resistance
Number of single wires	Number of stranding layer**	Number of single wires	Number of stranding layer**	AL	Steel	
6	1	1		1.52		1.52
7	1			1.31		1.31
7	1	7	1	1.67	0.43	1.67
12	1	7	1	2.17	0.43	2.17
18	2	1		1.90		1.90
19	2			1.80		1.80
22	2	7	1	2.04	0.43	2.04
24	2	7	1	2.08	0.43	2.08
26	2	7	1	2.16	0.43	2.16
30	2	7	1	2.23	0.43	2.23
30	2	19	2	2.23	0.77	2.23
37	3			2.04		2.04
42	2	37	3	2.43	0.87	2.43
42	2	19	2	2.43	0.77	2.43
42	3	7	1	2.14	0.43	2.14
45	3	7	1	2.23	0.43	2.23
48	3	7	1	2.24	0.43	2.24
54	3	7	1	2.33	0.43	2.33
54	3	19	2	2.33	0.77	2.33
61	4			2.19		2.19
72	4	7	1	2.32	0.43	2.32
72	4	19	2	2.32	0.77	2.32
84	4	7	1	2.40	0.43	2.40
84	4	19	2	2.40	0.77	2.40
91	5			2.30		2.30

Performance of Conductors



The E-Modulus and Thermal Elongation Coefficient of ACSR,ACSR/AS,ACSR(Thermal resistance),ACSR/AS(Thermal resistance)

Structure		Ratio of AL, Steel Section	Final E-Modulus Mpa			Thermal Elongation Coefficient $\times 10^{-6}$ 1/°C		
			G	LB1A	LB14	G	LB1A	LB14
AL	Steel							
6	1	6.00	74300	70300	71400	18.8	19.2	19.1
7	7	5.06	77300	72600	74000	18.3	18.8	18.6
12	7	1.71	104800	94500	97400	15.3	15.7	15.6
18	1	18.00	62100	60600	61000	21.0	21.4	21.3
24	7	7.71	70500	67300	68200	19.4	19.8	19.7
26	7	6.13	73900	70000	71100	18.9	19.3	19.1
30	7	4.29	80500	75200	76700	17.9	18.3	18.2
30	19	4.37	80100	74900	76400	17.9	18.4	18.2
42	7	19.44	61600	60200	60600	21.3	21.5	21.4
45	7	14.46	63700	61900	62400	20.8	21.1	21.0
48	7	11.34	65900	63700	64300	20.3	20.6	20.5
54	7	7.71	70500	67300	68200	19.4	19.8	19.7
54	19	7.90	70200	67000	67900	19.5	19.9	19.8

Note: The scope of value

Al wire, Heat resistance AA wire:

E-Modulus--55000MPa

Al wire, Heat resistance AA wire:

Thermal Elongation Coefficient-- 23.0×10^{-6} 1/°C

Steel wire:

E-Modulus--190000MPa

AS wire(LB1A):

E-Modulus--162000MPa

AS wire(LB14):

E-Modulus--170000MPa

Galvanized steel wire:

Thermal Elongation Coefficient-- 11.5×10^{-6} 1/°C

AS wire(LB1A):

Thermal Elongation Coefficient-- 13.0×10^{-6} 1/°C

AS wire(LB14):

Thermal Elongation Coefficient-- 12×10^{-6} 1/°C

Performance of Conductors



E-Modulus and Thermal Elongation Coefficient of Thermal-resistance ACSR

Structure		Ratio of AL, Steel Section	Final E-Modulus Mpa			Thermal Elongation Coefficient $\times 10^{-6}$ 1/°C		
AL	Steel		G	LB14	LB20	G	LB14	LB20
6	1	6.00	78700	74300	73100	19.2	19.8	20.2
7	7	5.06	81800	76700	75400	18.8	19.4	19.8
12	7	1.71	110000	99500	96600	15.7	16.5	17.2
18	1	18.00	65800	64200	63800	21.4	21.7	21.8
24	7	7.71	74700	71100	70200	19.8	20.3	20.7
26	7	6.13	78300	74000	72900	19.3	19.8	20.2
30	7	4.29	85300	97900	77900	18.3	18.9	19.4
30	19	4.37	84900	79100	77600	18.4	19.0	19.5
42	7	19.44	65300	63800	63400	21.5	21.8	21.9
45	7	14.46	67500	65500	65000	21.1	21.4	21.6
48	7	11.34	69900	67400	66700	20.6	21.0	21.3
54	7	7.71	74700	71100	70200	19.8	20.3	20.6
54	19	7.90	74300	70900	70000	19.9	20.4	20.7

Note: The value scope

Heat-resistance Aluminum Alloy:

E-Modulus--686000MPa

Heat-resistance Aluminum Alloy:

Thermal elongation coefficient-- $23.0 \times 10^{-6} 1/^\circ C$

Steel wire:

E-Modulus--200900MPa

AS wire LB14:

E-Modulus--170000MPa

AS wire LB20:

E-Modulus--162000MPa

Steel wire:

Thermal elongation coefficient-- $11.5 \times 10^{-6} 1/^\circ C$

AS wire LB14:

Thermal elongation coefficient-- $12.0 \times 10^{-6} 1/^\circ C$

AS wire LB20:

Thermal elongation coefficient-- $13.0 \times 10^{-6} 1/^\circ C$

Aluminum Alloy Conductor Steel Reinforced

Cross section	Cross section			Number of single wire		Dia of single wire		Diameter		Weight	Rated Tensile Strength kN					DC Resistance at 20°C
	AL	Steel	Total			AL	Steel	Steel reinforced	Stranded wires		JLHA2					
	mm ²	mm ²	mm ²	AL	Steel	mm	mm	kg/km	G1A	G1B	G2A	G2B	G3A	Ω/km	Ω/km	
50/30	50.73	29.59	80.32	12	7	2.32	2.32	6.96	11.60	371	48.70	46.63	53.73	50.77	56.69	0.6551
70/40	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	510	66.94	64.09	72.63	69.79	77.92	0.4766
95/15	94.39	15.33	109.7	26	7	2.15	1.67	15.33	94.39	380	45.79	44.71	47.93	46.86	50.08	0.3521
95/20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	409	50.08	48.76	52.72	51.40	55.35	0.3493
95/55	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.00	707	90.40	84.77	98.28	94.34	106.16	0.3444
120/7	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	379	42.60	42.14	43.53	43.07	44.39	0.2789
120/20	115.7	18.82	134.5	26	7	2.38	1.85	5.55	15.07	466	56.14	54.82	58.77	57.45	61.41	0.2873
120/25	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	526	64.50	62.80	67.89	66.20	71.29	0.2713
120/70	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.00	894	114.41	107.28	119.40	114.41	131.51	0.2721
150/8	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.00	461	51.55	50.75	52.68	52.12	53.80	0.2290
150/20	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	549	64.99	63.67	67.62	66.31	70.26	0.2279
150/25	148.86	24.25	173.11	26	7	2.70	2.10	6.30	17.10	600	72.28	70.58	75.68	73.98	79.07	0.2232
150/35	147.26	34.36	181.62	30	7	2.50	2.50	7.50	17.50	675	82.61	80.21	87.42	85.02	91.89	0.2258
185/10	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.00	584	65.25	64.23	65.96	65.25	67.69	0.1809
185/25	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	706	83.54	81.85	86.94	85.24	90.33	0.1775
185/30	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	732	87.23	85.16	91.37	89.30	95.22	0.1833
185/45	184.73	43.10	227.83	30	7	2.80	2.80	8.40	19.6	847	103.63	100.61	109.67	106.65	115.27	0.1800
210/10	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.00	650	72.70	71.56	73.49	72.70	75.42	0.1624
210/25	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	789	93.36	91.47	97.16	95.26	100.95	0.1589
210/35	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	853	101.63	99.23	106.44	104.04	110.91	0.1569
210/50	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	960	117.38	113.97	124.22	120.80	130.57	0.1588
240/30	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	922	108.17	105.95	112.60	110.38	116.72	0.1359
240/40	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	964	114.81	112.08	120.25	117.53	125.31	0.1391
240/55	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1107	133.10	127.47	140.98	137.04	148.87	0.1378

Aluminum Alloy Conductor Steel Reinforced (Continued)

Cross section	Section			Number of single wire		wire Dia		Diameter		Weight	Rated Tensile Strength kN				DC Resistance at 20°C	
	AL	St	Total			AL	St	Steel Reinforced	Stranded wire		JLHA 1	JLHA 2	JLHA 1	JLHA 2	JLHA 1	JLHA 2
	mm²	mm²		AL	St	mm		mm	kg/km	G1A	G1B	G2A	G2B	G3A	Ω/km	
300/15	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	940	105.52	104.45	107.67	106.59	109.81	0.1119
300/20	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	1001	113.97	112.50	116.89	115.43	119.82	0.1096
300/25	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1058	122.03	120.14	125.83	123.93	129.62	0.1086
300/40	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1132	132.87	130.15	138.32	135.60	143.38	0.1107
300/50	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1210	144.02	140.61	150.86	147.44	157.21	0.1109
300/70	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1401	168.46	161.33	173.45	168.46	185.56	0.1089
400/20	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1286	144.35	142.88	147.27	145.81	150.20	0.0818
400/25	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1294	147.32	145.42	151.11	149.21	154.90	0.0848
400/35	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1348	154.48	152.08	159.29	156.89	163.76	0.0851
400/50	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1510	174.92	169.74	182.17	178.54	189.43	0.0832
400/65	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1610	189.25	182.75	198.36	193.81	207.47	0.0833
400/95	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1858	226.61	220.08	239.67	233.14	251.79	0.0816
500/35	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1641	185.79	183.38	190.60	188.20	195.07	0.0669
500/45	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1687	193.27	190.25	199.30	196.29	204.91	0.0680
500/65	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1896	219.62	213.11	228.73	224.17	237.84	0.0663
630/45	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2059	233.06	230.04	239.09	236.07	244.69	0.0533
630/55	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2208	250.70	245.07	258.59	254.64	266.47	0.0520
630/80	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	2386	278.95	273.32	290.19	284.57	300.63	0.0524
800/55	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2689	302.15	296.52	310.03	306.09	317.91	0.0408
800/70	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2790	316.78	309.66	321.77	316.78	333.88	0.0411
800/100	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2989	349.57	342.51	363.70	356.64	376.81	0.0418

Performance of Conductors

Heat-resistance Aluminum Alloy Conductor (60%IACS) steel reinforced

JNRLH60/G1A、JNRLH60/G1B, JNRLH60/G2A、JNRLH60/G2B, JNRLH60/G3A																	
Type	Ratio of steel	Cross section			Number of single wires		Dia of single wire		Diameter		Weight kg/km	Rated Tensile strength kN					DC. Resistance at 20°C
		Al	Steel	Total			Al	Steel	Steel reinforced	Stranded wire		G1A	G1B	G2A	G2B	G3A	
	%	mm ²		Al	Steel	mm		mm			G1A	G1B	G2A	G2B	G3A	Ω/km	
300	5	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	940	66.03	64.96	68.18	67.10	70.32	0.0989
300	7	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	1002	73.61	72.15	76.54	75.07	79.46	0.0968
300	9	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1058	82.53	80.64	86.32	84.43	90.17	0.0959
300	13	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1136	92.06	89.34	97.51	94.78	102.6	0.0977
300	16	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1210	103.3	99.87	110.1	106.7	116.5	0.0980
300	23	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1402	127.8	120.7	132.8	127.8	144.9	0.0962
400	5	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1286	90.30	88.83	93.23	91.76	96.15	0.0722
400	7	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1295	95.19	93.29	98.98	97.09	102.8	0.0749
400	9	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1349	102.5	100.1	107.3	104.9	111.8	0.0751
400	13	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1511	121.8	116.6	129.1	125.4	136.3	0.0736
400	16	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1611	135.0	128.5	144.1	139.6	153.2	0.0736
400	23	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1860	171.2	164.6	184.3	177.7	196.4	0.0720
500	7	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1642	119.7	117.3	124.5	122.1	129.0	0.0591
500	9	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1688	128.3	125.3	134.3	131.3	139.9	0.0601
500	13	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1897	152.9	146.4	162.0	157.5	171.1	0.0586
630	7	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2060	148.3	145.3	154.3	151.3	159.9	0.0471
630	9	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2209	163.7	158.1	171.6	167.6	179.5	0.0459
630	13	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	2388	192.6	187.0	203.8	198.2	214.3	0.0463
800	7	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2690	191.4	185.8	199.5	195.3	207.2	0.0361
800	9	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2791	206.9	199.8	211.9	206.9	224.0	0.0363
800	13	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2991	241.4	234.3	255.5	248.5	268.6	0.0369
1000	13	993.5	125.5	1119	54	19	4.84	2.90	14.5	43.54	3733	301.0	292.2	318.6	309.8	334.9	0.0296
1440	8	1439	117.0	1556	84	19	4.67	2.80	14.0	51.36	4898	362.1	353.9	378.5	370.3	393.7	0.0204

Heat-resistance Aluminum Alloy Conductor (60%IACS) steel reinforced (Continued)

JNRLH60/G1A、JNRLH60/G1B、JNRLH60/G2A、JNRLH60/G2B、JNRLH60/G3A																	
Type	Ratio of steel	Cross section			Number of single wires		Dia of single wire		Diameter		Weight kg/km	Rated Tensile strength kN					DC. Resistance at 20°C
		Al	Steel	Total			Al	Steel	Steel reinforced	Stranded wire		G1A	G1B	G2A	G2B	G3A	
	%	mm ²		Al	Steel	mm		mm			G1A	G1B	G2A	G2B	G3A	Ω/km	
50	17	48.25	8.04	56.29	6	1	3.20	3.20	3.20	9.60	195	16.66	15.86	17.79	17.22	18.91	0.6045
70	17	68.05	11.34	79.39	6	1	3.80	3.80	3.80	11.40	275	23.50	22.36	24.29	23.5	26.22	0.4287
70	58	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	511	57.94	55.10	63.63	60.79	68.92	0.4211
95	20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	409	37.14	35.82	39.77	38.46	42.41	0.3071
95	58	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.0	708	77.56	71.93	85.44	81.50	93.32	0.3042
120	6	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	379	27.27	26.80	28.19	27.73	29.05	0.2462
120	20	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	527	47.84	46.14	51.23	49.54	54.63	0.2385
120	58	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.0	896	98.16	91.04	103.1	98.16	115.3	0.2403
150	6	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.0	461	32.30	31.49	33.43	32.86	34.55	0.2023
150	13	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	549	46.20	44.88	48.83	47.52	51.47	0.2014
185	6	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.0	584	40.88	39.86	41.59	40.88	43.32	0.1598
185	13	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	706	58.67	56.97	62.06	60.37	65.46	0.1568
185	16	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	733	63.11	61.04	67.25	65.18	71.10	0.1618
210	6	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.0	651	45.55	44.41	46.34	45.55	48.27	0.1435
210	13	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	789	65.56	63.67	69.35	67.46	73.15	0.1404
210	16	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	854	73.47	71.07	78.28	75.88	82.75	0.1386
210	23	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	961	89.55	86.14	96.39	92.97	102.7	0.1404
240	13	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	922	75.68	73.46	80.11	77.90	84.23	0.1201
240	16	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	964	83.04	80.32	88.49	85.76	93.54	0.1229
240	23	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1108	101.0	95.38	108.9	104.9	116.8	0.1218

Heat-resistance Aluminum Alloy Conductor (58%IACS) steel reinforced

Type	Ratio of steel %	Cross section			Number of single wires		Dia of single wire		Diameter		Weight	Rated Tensile strength kN					DC. Resistance at 20°C
		Al	Steel	Total			Al	Steel	Steel reinforced	Stranded wire		G1A	G1B	G2A	G2B	G3A	
		mm ²			Al	Steel	mm		mm								
50	17	48.25	8.04	56.29	6	1	3.20	3.20	3.20	9.60	195	16.66	15.86	17.79	17.22	18.91	0.6254
70	17	68.05	11.34	79.39	6	1	3.80	3.80	3.80	11.40	275	23.50	22.36	24.29	23.5	26.22	0.4435
70	58	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	511	57.94	55.10	63.63	60.79	68.92	0.4356
95	20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	409	37.14	35.82	39.77	38.46	42.41	0.3176
95	58	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.0	708	77.56	71.93	85.44	81.50	93.32	0.2547
120	6	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	379	27.27	26.80	28.19	27.73	29.05	0.2547
120	20	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	527	47.84	46.14	51.23	49.54	54.63	0.2467
120	58	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.0	896	98.16	91.04	103.1	98.16	115.3	0.2486
150	6	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.0	461	32.30	31.49	33.43	32.86	34.55	0.2092
150	13	145.9	18.82	164.7	24	7	2.78	1.85	5.55	16.67	549	46.20	44.88	48.83	47.52	51.47	0.2083
185	6	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.0	584	40.88	39.86	41.59	40.88	43.32	0.1653
185	13	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	706	58.67	56.97	62.06	60.37	65.46	0.1622
185	16	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	733	63.11	61.04	67.25	65.18	71.10	0.1674
210	6	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.0	651	45.55	44.41	46.34	45.55	48.27	0.1484
210	13	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	789	65.56	63.67	69.35	67.46	73.15	0.1452
210	16	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	854	73.47	71.07	78.28	75.88	82.75	0.1434
210	23	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	961	89.55	86.14	96.39	92.97	102.7	0.1452
240	13	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	922	75.68	73.46	80.11	77.90	84.23	0.1242
240	16	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	964	83.04	80.32	88.49	85.76	93.54	0.1271
240	23	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1108	101.0	95.38	108.9	104.9	116.8	0.1260

Performance of Conductors



Heat-resistance Aluminum Alloy Conductor (58%IACS) steel reinforced (Continued)

JNRLH58/LB1A、JNRLH58/LB14																	
Type	Ratio of steel %	Cross section			Number of single wires		Dia of single wire		Diameter		Weight	Rated Tensile strength(kN)					DC. Resistance at 20°C
		Al	Steel	Total			Al	Steel	Steel reinforced	Stranded wire		JNRLH58	G1A	G1B	G2A	G2B	G3A
		mm ²		mm ²	Al	Steel	mm		mm			kg/km	G1A	G1B	G2A	G2B	G3A
300	5	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	940	66.03	64.96	68.18	67.10	70.32	0.1023
300	7	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	1002	73.61	72.15	76.54	75.07	79.46	0.1001
300	9	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1058	82.53	80.64	86.32	84.43	90.17	0.0992
300	13	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1136	92.06	89.34	97.51	94.78	102.6	0.1011
300	16	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1210	103.3	99.87	110.1	106.7	116.5	0.1014
300	23	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1402	127.8	120.7	132.8	127.8	144.9	0.0995
400	5	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1286	90.30	88.83	93.23	91.76	96.15	0.0747
400	7	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1295	95.19	93.29	98.98	97.09	102.8	0.0775
400	9	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1349	102.5	100.1	107.3	104.9	111.8	0.0777
400	13	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1511	121.8	116.6	129.1	125.4	136.3	0.0761
400	16	399.7	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1611	135.0	128.5	144.1	139.6	153.2	0.0761
400	23	398.9	93.27	501.0	30	#	4.16	2.50	12.5	29.1	1860	171.2	164.6	184.3	177.7	196.4	0.0745
500	7	407.8	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1642	119.7	117.3	124.5	122.1	129.0	0.0611
500	9	497.0	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1688	128.3	125.3	134.3	131.3	139.9	0.0622
500	13	488.6	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1897	152.9	146.4	162.0	157.5	171.1	0.0606
630	7	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2060	148.3	145.3	154.3	151.3	159.9	0.0487
630	9	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2209	163.7	158.1	171.6	167.6	179.5	0.0475
630	13	636.2	80.32	715.5	54	#	3.87	2.32	11.6	34.8	2388	192.6	187.0	203.8	198.2	214.3	0.0479
800	7	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2690	191.4	185.8	199.5	195.3	207.2	0.0373
800	9	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2791	206.9	199.8	211.9	206.9	224.0	0.0376
800	13	795.2	100.9	896.1	54	#	4.33	2.60	13.0	39.0	2991	241.4	234.3	255.5	248.5	268.6	0.0382
1000	13	993.5	125.5	1119	54	#	4.84	2.90	14.5	43.54	3733	301.0	292.2	318.6	309.8	334.9	0.0306
1440	8	1439	117.0	1556	84	#	4.67	2.80	14.0	51.36	4898	362.1	353.9	378.5	370.3	393.7	0.0211

High strength heat-resistance Aluminum Alloy Conductor (55%IACS) steel reinforced

Type	Ratio of steel %	JGQNLH55/G3A、JGQNLH55/EST														
		Cross section			Number of single wires		Dia of single wire		Diameter		Weight		Rated Tensile strength kN		DC. Resistance at 20°C	
		Al	Steel	Total	Al	Steel	Al	Steel	Al	Steel	JGQNLH55	JGQNLH55	G3A	EST	G3A	EST
		mm ²			Al	Steel	mm		mm		G3A	EST	G3A	EST		
50	17	48.25	8.04	56.29	6	1	3.20	3.20	3.20	9.60	195	195	22.72	24.09		
70	17	68.05	11.34	79.39	6	1	3.80	3.80	3.80	11.40	275	275	31.60	33.41		
70	58	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	511	511	74.43	80.12		
95	20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	409	409	48.70	50.58		
95	58	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.0	708	708	100.95	110.52		
120	6	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	379	379	38.45	39.38		
120	20	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	527	527	62.73	65.15		
120	58	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.0	896	896	124.93	150.58		
150	6	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.0	461	461	45.99	47.36		
150	13	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	549	549	63.03	64.92		
185	6	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.0	584	584	57.79	59.42		
185	13	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	706	706	80.23	82.65		
185	16	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	733	733	85.42	89.56		
210	6	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.0	651	651	64.38	66.20		
210	13	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	789	789	89.66	92.37		
210	16	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	854	854	99.47	104.28		
210	23	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	961	961	119.25	126.09		
240	13	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	922	922	103.53	107.96		
240	16	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	964	964	112.40	117.85		
240	23	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1108	1108	135.85	145.42		

Heat-resistance Aluminum Alloy Conductor (55%IACS) steel reinforced (Continued)

JGQNRLH55/G3A、JGQNRLH55/EST																
Type	Ratio of steel %	Cross section			Number of single wires		Dia of single wire		Diameter		Weight		Rated Tensile strength kN		DC. Resistance at 20°C	
		Al	Steel	Total			Al	Steel	Al	Steel	JGQNRLH55	G3A	EST	G3A	EST	Ω/km
		mm ²			Al	Steel	mm		mm		G3A	EST	G3A	EST	Ω/km	
300	5	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	940	940	93.78	95.31	0.1078	
300	7	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	1002	1002	103.44	105.53	0.1056	
300	9	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1058	1058	114.31	117.02	0.1046	
300	13	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1136	1136	126.27	131.72	0.1066	
300	16	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1210	1210	140.12	146.95	0.1069	
300	23	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1402	1402	169.08	180.48	0.1049	
400	5	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1286	1286	128.26	130.35	0.0788	
400	7	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1295	1295	133.74	136.45	0.0818	
400	9	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1349	1349	142.65	147.46	0.0820	
400	13	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1511	1511	167.84	176.65	0.0803	
400	16	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1611	1611	179.72	190.78	0.0803	
400	23	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1860	1860	221.26	234.32	0.0786	
500	7	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1642	1642	146.73	151.54	0.0645	
500	9	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1688	1688	180.55	186.58	0.0656	
500	13	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1897	1897	207.54	218.60	0.0639	
630	7	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2060	2060	201.06	207.09	0.0514	
630	9	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2209	2209	221.67	231.24	0.0501	
630	13	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	2388	2388	264.67	275.91	0.0504	
800	7	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2690	2690	260.91	270.48	0.0394	
800	9	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2791	2791	277.32	288.72	0.0396	
800	13	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2991	2991	321.19	335.32	0.0403	
1000	13	993.5	125.5	1119	54	19	4.84	2.90	14.5	43.54	3733	3733	400.49	418.06	0.0323	
1440	8	1439	117.0	1556	84	19	4.67	2.80	14.0	51.36	4898	4898	488.75	505.13	0.0223	

High strength heat-resistance Aluminum Alloy Conductor (52.5%IACS) steel reinforced

JGQNRLH52.5/G3A、JGQNRLH52.5/EST																	
Type	Ratio of steel %	Cross section			Number of single wires		Dia of single wire		Diameter		Weight		Rated Tensile strength kN		DC. Resistance at 20°C		
		Al	Steel	Total			Al	Steel	Al	Steel	JGQNRLH55	JGQNRLH55	G3A	EST	G3A	EST	Ω/km
		mm ²		Al	Steel	mm		mm		G3A	EST	G3A	EST				
50	17	48.25	8.04	56.29	6	1	3.20	3.20	3.20	9.60	195	195	22.72	25.25	0.6910		
70	17	68.05	11.34	79.39	6	1	3.80	3.80	3.80	11.40	275	275	31.60	35.04	0.4899		
70	58	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	511	511	74.43	81.66	0.4812		
95	20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	409	409	48.70	53.91	0.3509		
95	58	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.0	708	708	100.95	112.84	0.3477		
120	6	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	379	379	38.45	41.99	0.2814		
120	20	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	527	527	62.73	69.44	0.2726		
120	58	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.0	896	896	124.93	153.51	0.2746		
150	6	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.0	461	461	45.99	50.83	0.2311		
150	13	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	549	549	63.03	68.13	0.2301		
185	6	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.0	584	584	57.79	63.82	0.1827		
185	13	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	706	706	80.23	87.14	0.1793		
185	16	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	733	733	85.42	93.91	0.1850		
210	6	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.0	651	651	64.38	71.10	0.1640		
210	13	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	789	789	89.66	97.39	0.1604		
210	16	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	854	854	99.47	109.36	0.1585		
210	23	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	961	961	119.25	131.11	0.1605		
240	13	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	922	922	103.53	113.83	0.1372		
240	16	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	964	964	112.40	123.58	0.1405		
240	23	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1108	1108	135.85	151.21	0.1391		

Heat-resistance Aluminum Alloy Conductor (52.5%IACS) steel reinforced (Continued)

Type	Ratio of steel %	Cross section			Number of single wires		Dia of single wire		Diameter		Weight		Rated Tensile strength kN		DC. Resistance at 20°C	
		Al		Steel	Total	Al	Steel	Al	Steel	mm	mm	G3A	EST	G3A	EST	Ω/km
		mm²			Al	Steel										
300	5	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	940	940	93.78	102.44	0.1130	
300	7	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	1002	1002	103.44	112.81	0.1107	
300	9	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1058	1058	114.31	123.76	0.1096	
300	13	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1136	1136	126.27	138.92	0.1117	
300	16	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1210	1210	140.12	154.14	0.1120	
300	23	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1402	1402	169.08	187.81	0.1099	
400	5	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1286	1286	128.26	140.11	0.0825	
400	7	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1295	1295	133.74	145.86	0.0857	
400	9	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1349	1349	142.65	156.85	0.0859	
400	13	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1511	1511	167.84	186.24	0.0841	
400	16	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1611	1611	179.72	204.77	0.0841	
400	23	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1860	1860	221.26	248.28	0.0823	
500	7	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1642	1642	146.73	161.33	0.0675	
500	9	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1688	1688	180.55	198.51	0.0687	
500	13	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1897	1897	207.54	230.32	0.0670	
630	7	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2060	2060	201.06	228.92	0.0538	
630	9	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2209	2209	221.67	253.64	0.0525	
630	13	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	2388	2388	264.67	291.18	0.0528	
800	7	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2690	2690	260.91	298.98	0.0412	
800	9	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2791	2791	277.32	317.01	0.0415	
800	13	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2991	2991	321.19	363.15	0.0423	
1000	13	993.5	125.5	1119	54	19	4.84	2.90	14.5	43.54	3733	3733	400.49	452.84	0.0338	
1440	8	1439	117.0	1556	84	19	4.67	2.80	14.0	51.36	4898	4898	488.75	555.49	0.0234	

Heat-resistance Aluminum Alloy Conductor (60% IACS) Aluminum clad steel reinforced

JNRLH60/LB1A、JNRLH60/LB14

Type	Ratio of steel %	Cross section			Number of single wires	Dia of single wire		Diameter		Weight kg/km	Rated Tensile strength kN		DC. Resistance at 20°C Ω/km			
		Al	Steel	Total		Al	Steel	Steel reinforced	Stranded wire		JNRLH60	JNRLH60	JNRLH60	LB1A	LB14	
		mm ²		Al	Steel	mm		mm		LB1A	LB14	LB1A	LB14	LB1A	LB14	
50	17	48.25	8.04	56.29	6	1	3.20	3.20	3.20	9.60	185.4	189.8	17.46	18.91	0.5720	0.5817
70	17	68.05	11.34	79.39	6	1	3.80	3.80	3.80	11.40	261.5	267.7	23.50	26.22	0.4055	0.4125
70	58	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	461.7	484.2	60.38	68.92	0.3505	0.3698
95	20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	386.0	396.4	37.71	42.42	0.2876	0.2934
95	58	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.0	639.1	670.2	83.19	97.27	0.2533	0.2672
120	6	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	371.1	374.7	27.67	29.06	0.2416	0.2431
120	20	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	497.1	510.5	48.58	54.64	0.2233	0.2278
120	58	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.0	809.0	848.4	101.02	115.27	0.2000	0.2110
150	6	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.0	451.8	456.2	33.11	34.55	0.1984	0.1996
150	13	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	527.1	537.5	46.80	51.51	0.1927	0.1953
185	6	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.0	571.7	577.3	41.28	43.32	0.1568	0.1578
185	13	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	676.5	676.5	59.39	65.46	0.1502	0.1522
185	16	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	696.4	712.8	64.88	72.28	0.1533	0.1559
210	6	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.0	636.9	643.1	45.54	48.26	0.1408	0.1416
210	13	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	756.0	771.0	66.38	73.15	0.1343	0.1362
210	16	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	811.9	830.9	75.53	82.74	0.1313	0.1335
210	23	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	901.2	928.2	92.47	102.73	0.1300	0.1330
240	13	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	883.7	901.2	77.58	84.23	0.1149	0.1165
240	16	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	916.8	938.3	85.37	93.53	0.1164	0.1183
240	23	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1039.4	1070.5	106.65	116.78	0.1127	0.1153

Performance of Conductors



Heat-resistance Aluminum Alloy Conductor (60% IACS) Aluminum clad steel reinforced (Continued)

JNRLH60/LB1A、JNRLH60/LB14

Type	Ratio of steel %	Cross section			Number of single wires		Dia of single wire		Diameter		Weight kg/km		Rated Tensile strength kN		DC. Resistance at 20°C Ω/km	
		Al	Steel	Total			Al	Steel	Steel reinforced	Stranded wire	LB1A	LB14	LB1A	LB14	LB1A	LB14
		mm ²			Al	Steel	mm		mm							
300	5	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	921.2	929.6	66.49	70.33	0.0971	0.0977
300	7	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	976.8	988.3	74.24	79.47	0.0946	0.0953
300	9	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1025.3	1040.3	83.35	90.12	0.0931	0.0939
300	13	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1085.5	1107.0	94.40	102.56	0.0936	0.0948
300	16	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1150.1	1177.0	106.20	116.46	0.0928	0.0944
300	23	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1315.5	1354.8	130.70	144.95	0.0890	0.0911
400	5	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1260.4	1271.9	90.93	96.16	0.0710	0.0713
400	7	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1262.3	1277.3	96.01	102.78	0.0732	0.0737
400	9	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1307.4	1326.3	104.56	111.77	0.0729	0.0736
400	13	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1448.5	1477.1	126.94	136.26	0.0704	0.0714
400	16	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1534.2	1570.1	140.32	153.34	0.0697	0.0708
400	23	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1721.7	1773.3	175.35	194.94	0.0668	0.0683
500	7	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1354.3	1373.2	107.30	114.51	0.0577	0.0582
500	9	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1658.3	1682.1	132.23	141.29	0.0583	0.0589
500	13	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1782.0	1818.0	155.92	168.94	0.0561	0.0568
630	7	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2008.2	2032.0	150.86	159.91	0.0460	0.0464
630	9	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2140.5	2171.6	169.30	179.44	0.0445	0.0450
630	13	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	2293.1	2337.6	197.54	214.41	0.0443	0.0449
800	7	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2622.7	2653.8	197.03	207.17	0.0352	0.0355
800	9	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2704.4	2743.8	209.73	223.98	0.0353	0.0356
800	13	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2869.6	2925.5	247.52	268.71	0.0354	0.0359
1000	13	993.5	125.5	1119	54	19	4.84	2.90	14.5	43.54	3581.4	3651.0	308.57	334.92	0.0284	0.0287
1440	8	1439	117.0	1556	84	19	4.67	2.80	14.0	51.36	4759.9	4824.8	369.20	393.77	0.0199	0.0201

Heat-resistance Aluminum Alloy Conductor (58% IACS) Aluminum clad steel reinforced

JNRLH58/LB1A、JNRLH58/LB14

Type	Ratio of steel %	Cross section			Number of single wires	Dia of single wire		Diameter		Weight kg/km	Rated Tensile strength kN		DC. Resistance at 20°C Ω/km			
		Al	Steel	Total		Al	Steel	Steel reinforced	Stranded wire		JNRLH60	JNRLH60	JNRLH60	JNRLH60		
		mm ²		Al	Steel	mm		mm		LB1A	LB14	LB1A	LB14	LB1A	LB14	
50	17	48.25	8.04	56.29	6	1	3.20	3.20	3.20	9.60	185.4	189.8	17.46	18.91	0.5906	0.6010
70	17	68.05	11.34	79.39	6	1	3.80	3.80	3.80	11.40	261.5	267.7	23.50	26.22	0.4187	0.4261
70	58	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	461.7	484.2	60.38	68.92	0.3606	0.3810
95	20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	386.0	396.4	37.71	42.42	0.2968	0.3030
95	58	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.0	639.1	670.2	83.19	97.27	0.2605	0.2753
120	6	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	371.1	374.7	27.67	29.06	0.2498	0.2513
120	20	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	497.1	510.5	48.58	54.64	0.2305	0.2353
120	58	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.0	809.0	848.4	101.02	115.27	0.2058	0.2174
150	6	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.0	451.8	456.2	33.11	34.55	0.2051	0.2064
150	13	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	527.1	537.5	46.80	51.51	0.1991	0.2019
185	6	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.0	571.7	577.3	41.28	43.32	0.1621	0.1631
185	13	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	676.5	676.5	59.39	65.46	0.1551	0.1573
185	16	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	696.4	712.8	64.88	72.28	0.1583	0.1610
210	6	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.0	636.9	643.1	45.54	48.26	0.1455	0.1464
210	13	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	756.0	771.0	66.38	73.15	0.1388	0.1407
210	16	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	811.9	830.9	75.53	82.74	0.1356	0.1379
210	23	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	901.2	928.2	92.47	102.73	0.1341	0.1374
240	13	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	883.7	901.2	77.58	84.23	0.1187	0.1204
240	16	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	916.8	938.3	85.37	93.53	0.1202	0.1223
240	23	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1039.4	1070.5	106.65	116.78	0.1163	0.1191

Performance of Conductors



Heat-resistance Aluminum Alloy Conductor (58% IACS) Aluminum clad steel reinforced (Continued)

JNRLH58/LB1A、JNRLH58/LB14

Type	Ratio of steel %	Cross section			Number of single wires		Dia of single wire		Diameter		Weight kg/km		Rated Tensile strength kN		DC. Resistance at 20°C Ω/km	
		Al	Steel	Total			Al	Steel	Steel reinforced	Stranded wire	LB1A	LB14	LB1A	LB14	LB1A	LB14
		mm ²			Al	Steel	mm		mm		LB1A	LB14	LB1A	LB14	LB1A	LB14
300	5	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	921.2	929.6	66.49	70.33	0.1004	0.1010
300	7	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	976.8	988.3	74.24	79.47	0.0978	0.0985
300	9	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1025.3	1040.3	83.35	90.12	0.0962	0.0939
300	13	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1085.5	1107.0	94.40	102.56	0.0967	0.0980
300	16	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1150.1	1177.0	106.20	116.46	0.0958	0.0975
300	23	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1315.5	1354.8	130.70	144.95	0.0919	0.0941
400	5	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1260.4	1271.9	90.93	96.16	0.0734	0.0738
400	7	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1262.3	1277.3	96.01	102.78	0.0757	0.0762
400	9	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1307.4	1326.3	104.56	111.77	0.0754	0.0761
400	13	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1448.5	1477.1	126.94	136.26	0.0727	0.0738
400	16	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1534.2	1570.1	140.32	153.34	0.0719	0.0732
400	23	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1721.7	1773.3	175.35	194.94	0.0689	0.0706
500	7	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1354.3	1373.2	107.30	114.51	0.0597	0.0601
500	9	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1658.3	1682.1	132.23	141.29	0.0603	0.0609
500	13	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1782.0	1818.0	155.92	168.94	0.0579	0.0587
630	7	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2008.2	2032.0	150.86	159.91	0.0476	0.0479
630	9	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2140.5	2171.6	169.30	179.44	0.0460	0.0465
630	13	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	2293.1	2337.6	197.54	214.41	0.0457	0.0464
800	7	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2622.7	2653.8	197.03	207.17	0.0364	0.0367
800	9	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2704.4	2743.8	209.73	223.98	0.0364	0.0368
800	13	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2869.6	2925.5	247.52	268.71	0.0366	0.0371
1000	13	993.5	125.5	1119	54	19	4.84	2.90	14.5	43.54	3581.4	3651.0	308.57	334.92	0.0293	0.0297
1440	8	1439	117.0	1556	84	19	4.67	2.80	14.0	51.36	4759.9	4824.8	369.20	393.77	0.0206	0.0207

Performance of Conductors

JL/LB1A, JL/LB14 Aluminum Conductor Aluminum Clad Steel Reinforced

Section	Cross section			Number of single wire		Dia of single wire		Diameter		Weight kg/km		Rated tensile strength kN		DC. Resistance at 20°C Ω/km	
	AL/AS	AL	AS	Total	AL	AS	Steel reinforced	Stranded wire	JLHA 1		JLHA 1		JLHA 1		
mm ²	mm ²			AL	AS	mm		mm		LB1A	LB14	LB1A	LB14	LB1A	LB14
50/8	48.25	8.04	56.29	6	1	3.20	3.20	3.20	9.60	185.4	188.2	17.61	188.15	0.5629	0.5726
70/10	68.05	11.34	79.39	6	1	3.80	3.80	3.80	11.40	261.5	267.7	23.36	254.03	0.3991	0.4059
70/40	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	461.8	484.2	60.66	69.20	0.3458	0.4063
95/20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	386.0	396.5	37.81	41.76	0.2831	0.2888
95/55	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.0	639.2	670.1	83.48	91.93	0.2498	0.2637
120/7	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	370.8	374.9	28.14	29.53	0.2377	0.2389
120/25	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	497.1	511.1	48.70	53.79	0.2199	0.2243
120/70	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.0	809.0	848.7	100.8	110.74	0.1974	0.2084
150/8	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.0	451.5	457.8	33.53	34.95	0.1952	0.1964
150/20	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	526.5	537.0	47.35	51.30	0.1898	0.1923
185/10	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.0	571.4	576.6	40.92	42.35	0.1542	0.1551
185/25	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	676.6	692.9	59.96	65.05	0.1478	0.1498
185/30	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	696.5	712.8	66.34	72.55	0.1508	0.1535
210/10	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.0	636.7	643.1	45.14	47.18	0.1384	0.1393
210/25	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	756.1	771.1	67.01	72.70	0.1322	0.1340
210/35	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	812.0	830.9	76.17	83.38	0.1292	0.1315
210/50	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	901.4	927.7	94.16	104.41	0.1280	0.1318
240/30	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	883.7	901.1	77.09	83.73	0.1131	0.1148
240/40	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	916.9	938.9	86.09	94.26	0.1145	0.1164
240/55	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1039	1070	108.60	115.82	0.1110	0.1137

JL/LB1A, JL/LB14 Aluminum Conductor Aluminum Clad Steel Reinforced (Continued)

Section	Cross section				Number of single wire	Dia of single wire		Diameter		Weight kg/km		Rated tensile strength kN		DC. Resistance at 20°C Ω/km	
	AL/AS	AL	AS	Total		AL	AS	Steel reinforced	Stranded wire	JLHA 1		JLHA 1		JLHA 1	
mm²	mm²			AL	AS	mm		mm		LB1A	LB14	LB1A	LB14	LB1A	LB14
300/15	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	921.1	929.8	68.87	72.08	0.09557	0.0972
300/20	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	976.4	987.8	76.67	81.06	0.09301	0.0937
300/25	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1026	1040	84.58	90.27	0.09160	0.0924
300/40	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1086	1107	94.69	102.86	0.09211	0.0731
300/50	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1150	1176	106.51	116.76	0.09132	0.0930
300/70	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1315	1355	130.10	140.06	0.08768	0.0898
400/20	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1260	1273	90.12	94.51	0.06982	0.0702
400/25	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1262	1277	97.19	102.88	0.07200	0.0725
400/35	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1308	1326	105.70	112.94	0.07177	0.0724
400/50	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1448	1477	128.10	135.91	0.06927	0.0703
400/65	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1532	1568	140.60	151.66	0.06857	0.0699
400/95	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1746	1798	177.20	196.75	0.06577	0.0673
500/35	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1600	1619	120.80	127.97	0.05678	0.0572
500/45	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1635	1659	129.90	138.94	0.05741	0.0579
500/65	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1818	1853	159.60	170.64	0.05517	0.0559
630/45	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2007	2031	151.50	160.52	0.04526	0.0456
630/55	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2141	2171	169.90	178.392	0.04384	0.0442
630/80	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	2290	2340	198.00	217.76	0.04364	0.0441
800/55	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2622	2653	197.80	206.29	0.03466	0.0349
800/70	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2705	2739	210.50	220.50	0.03471	0.0351
800/100	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2868	2919	248.30	269.47	0.03486	0.0354

JLHA1/LB1A、JLHA1/LB14 Aluminum Alloy Conductor Aluminum Clad Steel Reinforced

Cross section	Cross section			Number of single wire	Dia of single wire		Diameter		Weight kg/km		Rated tensile strength kN		DC. Resistance at 20°C Ω/km		
	AA	AS	Total		AA	AS	Steel reinforced	Stranded wire	JLHA1	JLHA1	JLHA1	JLHA1	JLHA1	JLHA1	
mm²	mm²			AA	AS	mm		mm		LB1A	LB14	LB1A	LB14	LB1A	LB14
50/30	50.73	29.59	80.3	12	7	2.32	2.32	6.96	11.60	336	352	52.00	58.21	0.5378	0.5710
70/40	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	462	484	71.47	80.01	0.3913	0.4154
95/15	94.39	15.33	109.7	26	7	2.15	1.67	5.01	13.61	362	371	49.07	52.29	0.3341	0.3404
95/20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	386	397	52.55	56.51	0.3257	0.3332
95/55	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.0	639	670	98.93	107.37	0.2827	0.3002
120/7	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	371	375	46.57	47.96	0.2754	0.2773
120/20	115.7	18.8	134.5	26	7	2.38	1.85	5.55	15.07	444	455	60.18	64.11	0.2725	0.2777
120/25	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	497	511	68.91	72.78	0.2529	0.2587
120/70	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.0	809	849	119.70	129.69	0.2233	0.2371
150/8	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.0	452	458	56.70	57.91	0.2262	0.2277
150/20	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	527	537	69.93	73.89	0.2189	0.2223
150/25	148.8	24.3	173.1	26	7	2.70	2.10	6.30	17.10	572	583	77.48	82.62	0.2118	0.2159
150/35	147.3	34.3	181.6	30	7	2.50	2.50	7.50	17.50	634	654	89.09	96.24	0.2088	0.2144
185/10	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.0	572	577	69.32	70.74	0.1787	0.1799
185/25	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	677	693	89.89	94.97	0.1706	0.1732
185/30	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	697	713	94.44	100.64	0.1739	0.1772
185/45	184.7	43.1	227.8	30	7	2.80	2.80	8.40	19.60	796	810	111.76	120.80	0.1665	0.1709
210/10	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.0	637	643	76.78	78.81	0.1604	0.1615
210/25	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	756	771	100.45	106.14	0.1526	0.1549
210/35	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	812	831	110.04	117.25	0.1489	0.1518
210/50	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	901	928	126.59	136.83	0.1470	0.1509
240/30	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	884	901	114.96	121.61	0.1306	0.1326
240/40	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	917	939	124.31	132.46	0.1320	0.1345
240/55	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1039	1070	145.97	154.43	0.1274	0.1308

JL/LB1A, JL/LB14 Aluminum Alloy Conductor Aluminum Clad Steel Reinforced (Continued)

Cross section	Cross section			Number of single wire		Dia of single wire		Diameter		Weight kg/km		Rated tensile strength kN		DC. Resistance at 20°C Ω/km	
	AA	AS	Total			AA	AS	Steel reinforced	Stranded wire	JLHA1	JLHA1	JLHA1	JLHA1	JLHA1	JLHA1
mm²	mm²			AA	AS	mm		mm		LB1A	LB14	LB1A	LB14	LB1A	LB14
300/15	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	921	930	114.88	118.11	0.1107	0.1114
300/20	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	976	988	123.70	128.09	0.1077	0.1086
300/25	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1025	1040	132.04	137.73	0.1060	0.1071
300/40	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1085	1107	141.21	149.38	0.1063	0.1079
300/50	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1150	1176	152.94	163.18	0.1053	0.1073
300/70	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1315	1355	180.47	187.40	0.1007	0.1034
400/20	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1260	1273	153.11	157.50	0.0809	0.0814
400/25	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1262	1277	159.89	165.58	0.0834	0.0841
400/35	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1307	1326	168.27	175.49	0.0830	0.0839
400/50	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1448	1477	192.10	202.97	0.0800	0.0812
400/65	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1532	1568	202.44	213.48	0.0790	0.0805
400/95	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1746	1798	240.37	259.97	0.0755	0.0775
500/35	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1600	1619	197.79	205.00	0.0658	0.0663
500/45	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1635	1659	205.62	214.68	0.0664	0.0671
500/65	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1818	1853	239.88	250.95	0.0637	0.0647
630/45	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2007	2030	248.11	257.17	0.0524	0.0528
630/55	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2141	2171	269.13	277.57	0.0507	0.0513
630/80	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	2290	2340	296.47	313.65	0.0503	0.0511
800/55	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2622	2653	324.06	332.51	0.0401	0.0405
800/70	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2704	2739	335.79	345.78	0.0402	0.0406
800/100	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2868	2919	371.53	392.76	0.0402	0.0409

Performance of Conductors

JLHA2/LB1A、JLHA2/LB14 Aluminum Alloy Conductor Aluminum Clad Steel Reinforced

Cross section	Cross section			Number of single wire		Dia of single wire		Diameter		Weight kg/km		Rated tensile strength kN		DC. Resistance at 20°C Ω/km	
	AA	AS	Total			AA	AS	Steel reinforced	Stranded wire	JLHA2	JLHA2	JLHA2	JLHA2	JLHA2	JLHA2
mm²	mm²	mm²	AA	AS	mm	mm	mm	mm	mm	LB1A	LB14	LB1A	LB14	LB1A	LB14
50/30	50.73	29.59	80.3	12	7	2.32	2.32	6.96	11.60	336	352	50.47	56.69	0.5337	0.56638
70/40	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	462	484	69.37	77.92	0.3883	0.41205
95/15	94.39	15.33	109.7	26	7	2.15	1.67	5.01	13.61	362	371	46.24	49.46	0.3311	0.33736
95/20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	386	397	50.65	54.60	0.3228	0.33016
95/55	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.0	639	670	96.03	104.48	0.2805	0.29771
120/7	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	371	375	43.01	44.40	0.2729	0.27468
120/20	115.7	18.8	134.5	26	7	2.38	1.85	5.55	15.07	444	455	56.69	60.64	0.2701	0.27522
120/25	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	497	511	65.24	70.33	0.2507	0.25641
120/70	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.0	809	849	117.27	127.25	0.2216	0.23514
150/8	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.0	452	458	52.36	53.57	0.2241	0.22555
150/20	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	527	537	65.57	69.52	0.2170	0.22027
150/25	148.8	24.3	173.1	26	7	2.70	2.10	6.30	17.10	572	583	73.06	78.16	0.2100	0.21395
150/35	147.3	34.3	181.6	30	7	2.50	2.50	7.50	17.50	634	654	84.61	91.82	0.2069	0.21246
185/10	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.0	572	577	65.65	67.07	0.1771	0.17827
185/25	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	677	693	84.27	89.36	0.1690	0.17160
185/30	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	697	713	88.99	95.21	0.1723	0.17560
185/45	184.7	43.1	227.8	30	7	2.80	2.80	8.40	19.60	796	810	106.21	115.26	0.1650	0.16942
210/10	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.0	637	643	72.68	74.72	0.1590	0.16002
210/25	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	756	771	94.18	99.87	0.1512	0.15354
210/35	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	812	831	103.68	110.90	0.1476	0.15042
210/50	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	901	928	120.30	130.55	0.1457	0.14958
240/30	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	884	901	110.07	116.72	0.1294	0.13135
240/40	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	917	939	117.13	125.30	0.1308	0.13333
240/55	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	1039	1070	138.74	147.19	0.1263	0.12968

Performance of Conductors



JLHA2/LB1A、JLHA2/LB14 Aluminum Alloy Conductor Aluminum Clad Steel Reinforced (Continued)

Cross section	Cross section			Number of single wire	Dia of single wire		Diameter		Weight kg/km		Rated tensile strength kN		DC. Resistance at 20°C Ω/km		
	AA	AS	Total		AA	AS	Steel reinforced	Stranded wire	JLHA2	JLHA2	JLHA2	JLHA2	JLHA2	JLHA2	
mm²	mm²			AA	AS	mm		mm		LB1A	LB14	LB1A	LB14	LB1A	LB14
300/15	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	921	930	105.98	109.20	0.1097	0.11038
300/20	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	976	988	114.60	118.99	0.1067	0.10761
300/25	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	1025	1040	122.85	128.54	0.1050	0.10609
300/40	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	1085	1107	135.21	143.38	0.1053	0.10693
300/50	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	1150	1176	146.94	157.19	0.1043	0.10630
300/70	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1315	1355	171.32	181.29	0.0998	0.10246
400/20	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1260	1273	144.98	149.37	0.0801	0.08064
400/25	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1262	1277	148.13	153.82	0.0826	0.08331
400/35	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1307	1326	156.55	163.76	0.0823	0.08312
400/50	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1448	1477	180.10	190.98	0.0793	0.08047
400/65	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1532	1568	194.45	205.51	0.0783	0.07981
400/95	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1746	1798	232.23	251.81	0.0749	0.07684
500/35	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1600	1619	187.85	195.06	0.0652	0.06569
500/45	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1635	1659	195.86	204.91	0.0658	0.06649
500/65	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1818	1853	224.83	235.89	0.0631	0.06409
630/45	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	2007	2030	235.65	244.70	0.0519	0.05236
630/55	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	2141	2171	256.33	264.78	0.0502	0.05077
630/80	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	2290	2340	284.06	300.93	0.0499	0.05061
800/55	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2622	2653	307.78	316.22	0.0398	0.04009
800/70	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2704	2739	319.64	329.62	0.0398	0.04020
800/100	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2868	2919	355.66	376.85	0.0399	0.04048

JL/LHA1, JL/LHA2 Aluminum Conductor Aluminum Alloy Reinforced

Cross section	Cross section			Number of single wires		Dia of single wire		Diameter		Weight kg/km	Rated Tensile strength kN		DC. Resistance at 20°C Ω/km	
	Al/AA	Al	AA	Total	Al	AA	AA reinforced	Stranded wire	JL		LHA1	LHA2	JL	
	mm ²	mm ²			Al	AA	mm		mm	LHA1	LHA2	LHA1	LHA2	
50/30	50.73	29.59	80.32	12	7	2.32	2.32	6.96	11.60	220.4	18.49	17.61	0.3777	0.3765
70/40	69.73	40.67	110.4	12	7	2.72	2.72	8.16	13.60	303.0	25.07	23.85	0.2748	0.2739
95/15	94.39	15.33	109.7	26	7	2.15	1.67	15.33	94.39	302.3	21.97	21.51	0.2680	0.2677
95/20	95.14	18.82	114.0	7	7	4.16	1.85	5.55	13.87	312.6	21.34	20.77	0.2579	0.2575
95/55	96.51	56.30	152.8	12	7	3.20	3.20	9.60	16.00	419.4	34.22	32.53	0.1985	0.1979
120/7	118.9	6.61	125.5	18	1	2.90	2.90	2.90	14.50	345.3	22.36	22.16	0.2310	0.2309
120/20	115.7	18.82	134.5	26	7	2.38	1.85	5.55	15.07	370.5	26.36	25.80	0.2186	0.2184
120/25	122.5	24.25	146.8	7	7	4.72	2.10	6.30	15.74	402.4	27.48	26.75	0.2003	0.2000
120/70	122.2	71.25	193.5	12	7	3.60	3.60	10.8	18.00	530.8	42.00	40.57	0.1568	0.1563
150/8	144.8	8.04	152.8	18	1	3.20	3.20	3.20	16.00	420.4	26.51	26.26	0.1897	0.1896
150/20	145.7	18.82	164.7	24	7	2.78	1.85	5.55	16.67	453.1	30.89	30.32	0.1780	0.1779
150/25	148.86	24.25	173.11	26	7	2.70	2.10	6.30	17.10	476.9	33.19	32.46	0.1699	0.1697
150/35	147.26	34.36	181.62	30	7	2.50	2.50	7.50	17.50	500.2	36.94	35.91	0.1631	0.1628
185/10	183.2	10.18	193.4	18	1	3.60	3.60	3.60	18.00	532.1	32.52	32.32	0.1499	0.1498
185/25	187.0	24.25	211.3	24	7	3.15	2.10	6.30	18.9	581.9	38.74	38.01	0.1387	0.1385
185/30	181.3	29.59	210.9	26	7	2.98	2.32	6.96	18.88	581.1	40.44	39.55	0.1395	0.1393
185/45	184.73	43.10	227.83	30	7	2.80	2.80	8.40	19.6	627.5	45.41	44.12	0.1300	0.1298
210/10	204.1	11.34	215.5	18	1	3.80	3.80	3.80	19.00	592.9	36.23	36.00	0.1346	0.1345
210/25	209.0	27.10	236.1	24	7	3.33	2.22	6.66	19.98	650.3	43.29	42.48	0.1241	0.1239
210/35	211.7	34.36	246.1	26	7	3.22	2.50	7.50	20.38	677.9	46.10	45.07	0.1195	0.1194
210/50	209.2	48.82	258.1	30	7	2.98	2.98	8.94	20.86	710.8	51.43	49.97	0.1148	0.1146
240/30	244.3	31.67	276.0	24	7	3.60	2.40	7.20	21.60	760.1	49.38	48.43	0.1061	0.1060
240/40	238.8	38.90	277.7	26	7	3.42	2.66	7.98	21.66	765.1	52.04	50.88	0.1059	0.1058

JL/LHA1, JL/LHA2 Aluminum Conductor Aluminum Alloy Reinforced (Continued)

Cross section	Cross section			Number of single wires	Dia of single wire		Diameter		Weight kg/km	Rated Tensile strength kN		DC. Resistance at 20°C Ω/km	
	Al/AA	Al	AA		Al	AA	AA reinforced	Stranded wire		JL		JL	
		mm ²	mm ²		Al	AA	mm	mm		LHA1	LHA2	LHA1	LHA2
240/55	241.3	56.3	297.8	30	7	3.20	3.20	9.60	22.40	819.6	58.11	56.42	0.0995 0.0994
300/15	296.9	15.33	312.2	42	7	3.00	1.67	5.01	23.01	861.3	55.46	55.00	0.0931 0.0930
300/20	303.4	20.91	324.3	45	7	2.93	1.95	5.85	23.43	894.8	58.37	57.75	0.0898 0.0898
300/25	306.2	27.10	333.3	48	7	2.85	2.22	6.66	23.76	919.5	60.86	60.05	0.0876 0.0876
300/40	300.1	38.90	339.0	24	7	3.99	2.66	7.98	23.94	933.6	60.66	59.49	0.0864 0.0863
300/50	299.5	48.82	348.4	26	7	3.83	2.98	8.94	24.26	959.7	63.79	62.32	0.0844 0.0843
300/70	305.4	71.25	376.6	30	7	3.60	3.60	10.8	25.2	1037.3	72.02	69.88	0.0786 0.0785
400/20	406.4	20.91	427.3	42	7	3.51	1.95	5.85	26.9	1178.8	71.82	71.19	0.0680 0.0680
400/25	391.9	27.10	419.0	45	7	3.33	2.22	6.66	26.6	1156.0	73.47	72.66	0.0695 0.0695
400/35	390.9	34.36	425.2	48	7	3.22	2.50	7.50	26.8	1173.2	75.67	74.63	0.0687 0.0686
400/50	399.7	51.82	451.5	54	7	3.07	3.07	9.21	27.6	1245.8	82.79	81.24	0.0650 0.0650
400/65	398.9	65.06	464.0	26	7	4.42	3.44	10.3	28.0	1278.2	84.97	83.02	0.0634 0.0633
400/95	407.8	93.27	501.0	30	19	4.16	2.50	12.5	29.1	1380.9	95.56	92.76	0.0591 0.0590
500/35	497.0	34.36	531.4	45	7	3.75	2.50	7.50	30.0	1466.0	90.69	89.66	0.0548 0.0548
500/45	488.6	43.10	531.7	48	7	3.60	2.80	8.40	30.0	1466.8	92.18	90.89	0.0549 0.0549
500/65	501.9	65.06	566.9	54	7	3.44	3.44	10.3	31.0	1564.1	103.96	102.01	0.0518 0.0517
630/45	623.5	43.10	666.6	45	7	4.20	2.80	8.40	33.6	1838.9	113.77	112.47	0.0437 0.0437
630/55	639.9	56.30	696.2	48	7	4.12	3.20	9.60	34.3	1920.8	120.68	118.99	0.0419 0.0419
630/80	636.2	80.32	715.5	54	19	3.87	2.32	11.6	34.8	1974.8	127.90	125.49	0.0410 0.0409
800/55	814.3	56.30	870.6	45	7	4.80	3.20	9.60	38.4	2401.9	148.59	146.90	0.0335 0.0335
800/70	808.2	71.25	879.4	48	7	4.63	3.60	10.8	38.6	2426.1	151.76	150.33	0.0332 0.0332
800/100	795.2	100.9	896.1	54	19	4.33	2.60	13.0	39.0	2473.1	160.02	157.00	0.0328 0.0327

JLHA1、JLHA2 Aluminum Alloy Conductor

Nominal cross section	Structure	Section of AL	Overall Dia	Rated Tensile Strength		DC. Resistance at 20°C		Weight
				kN		Ω/km		
mm ²	No/mm	mm ²	mm	JLHA1	JLHA2	JLHA1	JLHA2	kg/km
95.	7/4.16	95.14	12.48	29.9	28.1	0.3497	0.3464	260.5
120	19/2.85	121.21	14.25	39.3	35.8	0.2758	0.2732	333.5
150	19/3.15	148.07	15.75	48.1	43.8	0.2258	0.2236	407.4
185	19/3.50	182.80	17.50	59.4	54.0	0.1829	0.1812	503.0
210	19/3.75	209.85	18.75	66.1	62.0	0.1593	0.1578	577.4
240	19/4.00	238.76	20.00	75.2	70.6	0.1400	0.1387	656.9
300	37/3.20	297.57	22.40	96.7	87.9	0.1126	0.1115	820.4
400	37/3.70	397.83	25.90	125.3	117.6	0.0842	0.0834	1097.0
500	37/4.16	502.90	29.12	158.4	148.6	0.0666	0.0660	1387.0
630	61/3.63	631.30	32.67	198.8	186.5	0.0532	0.0527	1744.0
800	61/4.10	805.36	36.90	253.6	238.0	0.0417	0.0413	2225.0