

Technical Data **LINEAX™** H07RN-F

Nbre of cores Cross section (mm ²)	Permissible current rating (A)	Voltage drop $\Delta u(\cos \phi 0,8)$ V/A.km	Outer diameter (mm)			Weigth (kg/km)
			Conductor	Mini	Maxi	
1 x 1.5	23	23.3	1.5	5.7	7.1	50
1 x 2.5	32	14.0	1.9	6.3	7.9	66
1 x 4	43	8.7	2.5	7.2	9.0	94
1 x 6	56	5.9	3.0	7.9	9.8	109
1 x 10	77	3.4	3.8	9.5	11.9	182
1 x 16	102	2.2	5.0	10.8	13.4	256
1 x 25	136	1.4	6.3	12.7	15.8	369
1 x 35	168	1.04	7.6	14.3	17.9	482
1 x 50	203	0.75	9.0	16.5	20.6	662
1 x 70	254	0.56	10.8	18.6	23.3	895
1 x 95	315	0.44	12.7	20.8	26.0	1160
1 x 120	363	0.36	13.9	22.8	28.6	1430
1 x 150	416	0.31	15.9	25.2	31.4	1740
1 x 185	475	0.28	17.7	27.6	34.4	2160
1 x 240	559	0.23	19.4	30.6	38.3	2730
1 x 300	637	0.20	23.0	33.5	41.9	3480
1 x 400	746	0.18	26.0	37.4	46.8	4510
1 x 500	833	0.16	30.0	41.3	52.0	5700
2 x 1	18	39.4	1.3	7.7	10.0	99
2 x 1.5	23	27.0	1.5	8.5	11.0	111
2 x 2.5	32	16.2	1.9	10.2	13.1	161
2 x 4	43	10.1	2.5	11.8	15.1	238
2 x 6	56	6.7	3.0	13.1	16.8	279
2 x 10	77	3.8	3.8	17.7	22.6	538
2 x 16	102	2.5	5.0	20.2	25.7	744
2 x 25	136	1.68	6.3	24.3	30.7	1074

Permissible current ratings are shown for an ambient temperature of 30°C where the cable is installed in fixed installations for a maximum operating and a conductor temperature of 85°C.
For other temperatures refer to NFC 15.100 for correction factors.

DC Copper Busbar Ampacities

The following tables have been provided by the Alliance for Telecommunications Industry Solutions (ATIS), T1 Committee, and represent ampacities for busbar sizes and arrangements typically found in the telecommunications industry. The number of sizes shown are not as extensive as those in the tables of AC ampacities, and there may be slight discrepancies between the ampacities shown here and those obtained by calculations derived from AC ampacities. CDA would encourage the reader to use the more conservative of the two figures, if there is a discrepancy.

The ampacities that follow are from Table 5 of Standard T1.311, and are reproduced here solely for the convenience of the viewer. Further reproduction or use of this document is prohibited without the express written permission of ATIS.

If you wish to purchase a copy of the complete Standard, please visit the [ATIS Document Center](#).

No. of Bars	Thickness	Width	Cross-section Area(cm)	Ampacity Copper	
				A ¹	B ²
1	1/8	1/2	79.6	154	152
		3/4	119.4	215	212
		1	159.2	275	271
		1 1/2	238.7	390	385
		2	318.3	503	496
1	1/4	1/2	159.2	238	234
		1	318.3	409	403
		1 1/2	477.5	572	564
		2	636.6	731	721
		2 1/2	795.8	887	869
		3	954.9	1,040	1,019
		3 1/2	1,114.0	1,192	1,152
		4	1,273.0	1,342	1,295
		6	1,910.0	1,931	1,820
8	2,546.0	3,092	2,828		
1	3/8	1	477.5	524	517
		1 1/2	716.2	724	714
		2	954.9	919	906
		2 1/2	1,194.0	1,110	1,087
		3	1,432.0	1,298	1,272
		4	1,910.0	1,667	1,612
		6	2,865.0	2,388	2,250
		8	3,820.0	3,092	2,828
1	1/2	1	636.6	632	622
		1 1/2	954.9	863	851
		2	1,273.0	1,088	1,073
		3	1,910.0	1,523	1,494
		4	2,546.0	1,951	1,887
		6	3,820.0	2,783	2,623
		8	5,093.0	3,596	3,289
		2	1/4	2	1,273.0
3	1,910.0			1,834	1,735
4	2,546.0			2,350	2,163
6	3,820.0			3,352	2,937
8	5,093.0			4,325	3,583
2	1/2	2	2,546.0	1,961	1,902
		3	3,820.0	2,715	2,577
		4	5,093.0	3,445	3,182
		6	7,638.0	4,861	4,275

		8	10,186.0	6,236	5,189
3	1/4	4 6 8	3,820.0 5,730.0 7,640.0	3,342 4,745 6,105	2,996 3,992 4,770
3	1/2	4 6 8	7,639.0 11,459.0 15,278.0	4,918 6,902 8,824	4,437 5,848 6,950
4	1/4	2 3 4 6 8	2,546.0 3,820.0 5,093.0 7,639.0 10,186.0	2,426 3,394 4,328 6,130 7,872	2,313 3,123 3,819 5,026 5,916
4	1/2	4 6 8	10,168.0 15,278.0 20,371.0	6,384 8,933 11,395	5,673 7,392 8,659
5	1/4	4 6 8	6,365.0 9,550.0 12,710.0	5,312 7,512 9,634	4,637 6,048 7,041
5	1/2	4 6 8	12,732.0 19,098.0 25,464.0	7,847 10,960 13,960	6,915 8,921 10,340
6	1/4	4 6 8	7,610.0 11,410.0 15,330.0	6,295 8,891 11,395	5,452 7,064 8,154
6	1/2	4 6 8	15,278.0 22,918.0 30,557.0	9,309 12,980 16,520	8,148 10,445 12,005
7	1/4	6 8	13,370.0 17,822.0	10,270 13,150	8,076 9,259
7	1/2	6 8	26,737.0 35,650.0	15,000 19,080	11,960 13,660
8	1/4	6 8	15,280.0 20,372.0	11,645 14,905	9,086 10,360
8	1/2	6 8	30,557.0 40,742.0	17,020 21,635	13,475 15,310
9	1/4	6 8	17,190.0 22,914.0	13,020 16,660	10,095 11,455
9	1/2	6 8	34,376.0 45,835.0	19,040 24,190	14,985 16,955
10	1/4	6 8	19,100.0 25,460.0	14,400 18,415	11,100 12,545
10	1/2	6 8	38,190.0 50,928.0	21,060 26,745	16,495 18,600
11	1/4	6 8	21,010.0 28,013.0	15,775 20,170	12,105 13,640
12	1/4	6 8	22,920.0 30,560.0	17,150 21,925	13,110 14,725

1. The ampacity rating is based on a 30C rise above a 40C ambient. The bars are run with their long axis vertical. The spacing between bars is equal to or more than their thickness, and the bars are run in a horizontal plane.

2. Ampacity rating to be used when the long axis of the bars is in the horizontal plane, or when the spacing between bars is less than the thickness of the bars, or when the bars are run in a vertical direction.

3. The minimum bending radius for copper is equal to the thickness of the bar. The minimum bending radius for aluminum is equal to twice the thickness of the bar. The surface roughening that may occur at the bend is not serious as long as it is only a surface condition.

4. The copper bus bar is ETP-110 100% IACS (International Annealed Copper Standard) conductivity (0.15328 ohm-gram/square meter) per ASTM