

Super Thermal Aluminium Conductor Invar Reinforced STACIR

Standard Specification : KEPCO

Application : Used for overhead power transmission lines

Construction

Conductor : The center wires of galvanized invar and the outer layers of super thermal resistance aluminum alloy



Nominal	Cross Section Area		Number / Dia. Of Wire				Overall Diameter Approx.	Approx. Weight of Conductor	DC Resistance at 20°C Max.	Current Carrying Capacity *	Rated Ultimate Strength	Standard Length
	Calc. Cross Section Area		ST-Al		Invar							
	ST-Al	Invar	No.	mm	No.	mm						
mm ²	mm ²	mm ²	No.	mm	No.	mm	mm	kg/km	Ω/km	A	kg	m
120	124.6	29.1	30	2.30	7	2.30	16.1	580	0.2370	746	4,890	5,000
160	159.3	37.2	30	2.60	7	2.60	18.2	740	0.1850	883	6,140	3,000
240	241.3	56.3	30	3.20	7	3.20	22.4	1,122	0.1220	1,172	9,170	3,000
330	326.7	52.8	26	4.00	7	3.10	25.3	1,330	0.0904	1,424	10,000	2,000
410	413.5	67.4	26	4.50	7	3.50	28.5	1,687	0.0714	1,674	12,720	2,000
480	483.8	33.5	45	3.70	7	2.47	29.6	1,611	0.0607	1,800	10,500	1,500
610	612.4	79.4	54	3.80	7	3.80	34.2	2,336	0.0481	2,137	16,960	1,500
810	814.3	56.3	45	4.80	7	3.20	38.4	2,712	0.3630	2,559	17,440	1,500

Remark : • Ambient temperature : 35°C • Wind Velocity : 0,6 m/Sec
• Continuous operating temperature of conductor : 80°C