

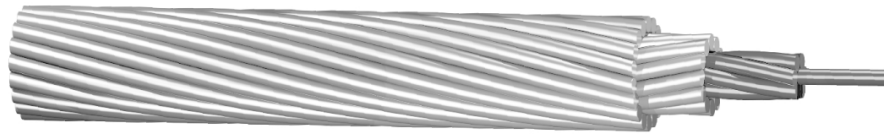
# Thermal Aluminium Conductor Steel Reinforced T-ACSR

Standard Specification : JEC 197

**Application** : Used for overhead power transmission lines

**Construction**

Conductor : The center wire or wires of galvanized steel and the outer layer or layers of thermal resistance alloy aluminium



Cross Section Area			Number / Dia. Of Wire				Overall Diameter Approx.	Approx. Weight of Conductor	DC Resistance at 20°C Max.	Current Carrying Capacity *	Rated Ultimiated Strength	Standard Length
Nominal	Calc. Cross Section Area		TAL		GSW							
TAL	TAL	Steel	No.	mm	No.	mm						
mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	No.	mm	No.	mm	mm	kg/km	Ω/km	A	kg	m
58	57.7	9.6	6	3.50	1	3.5	10.5	234	0.5050	375	1,980	5,000
80	83.1	13.9	6	4.20	1	4.2	12.6	336	0.3500	480	2,770	5,000
80	79.6	21.2	15	2.6	4	2.6	13.0	386	0.3680	470	3,810	5,000
95	95.4	15.9	6	4.5	1	4.5	13.5	386	0.3050	525	3,180	5,000
100	99.1	26.4	15	2.9	4	2.9	14.5	480	0.2960	545	4,740	5,000
120	120.6	32.2	15	3.2	4	3.2	16.0	585	0.2430	620	5,550	5,000
120	124.6	29.1	30	2.30	7	2.30	16.1	574	0.2370	630	5,460	5,000
160	159.3	37.2	30	2.60	7	2.60	18.2	734	0.1850	745	6,980	3,000
200	198.2	46.2	30	2.90	7	2.90	20.3	912	0.1490	860	8,680	3,000
240	241.3	56.3	30	3.20	7	3.20	22.4	1,111	0.1220	980	10,170	2,000
330	326.7	52.8	26	4.00	7	3.10	25.3	1,320	0.0901	1,190	10,940	2,000
410	413.5	67.4	26	4.50	7	3.50	28.5	1,674	0.0712	1,390	13,900	1,500
520	519.5	67.4	54	3.50	7	3.50	31.5	1,969	0.0567	1,610	15,590	1,500
610	612.4	79.4	54	3.80	7	3.80	34.2	2,321	0.0481	1,795	18,380	1,000
680	678.6	88.0	54	4.00	7	4.00	36.0	2,572	0.0434	1,920	19,790	1,000
680	684.2	46.2	45	4.40	7	2.90	35.1	2,260	0.0431	1,910	15,590	1,000
810	814.3	56.3	45	4.80	7	3.20	38.4	2,700	0.0362	2,145	18,460	1,000
1160	1,163.8	97.0	84	4.20	7	4.20	46.2	3,997	0.0254	2,700	27,870	500
1520	1,520.0	126.7	84	4.80	7	4.80	52.8	5,221	0.0195	3,185	36,410	500

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