



STACIR/AW - Super Thermal-resistant Aluminum-alloy Conductors Aluminum-clad Invar-reinforced

Construction:

S-TAL Grade Aluminum-Zirconium wires AT3, concentrically stranded about a steel core. Core wire for STACIR/AW is available with aluminum-clad Invar Wires (Ni-Fe Alloy) wires (AW). Additional corrosion protection is available through the application of grease to the core or infusion of the complete cable with grease.

Values based on following Specifications:

- Super Thermal-resistant aluminium alloy wire for overhead line conductor IEC 62004
- Round wire concentric lay overhead electrical stranded conductors IEC 61089
- Aluminium-clad steel wires for electrical purposes IEC 1232

Applications

New Generation Conductors capable to work at High Temperature without any loss of Strength to carter High Ampacity requirement. Used as bare overhead transmission cable and as primary and secondary distribution cable. STACIR/AW offers optimal strength for line design. Variable steel core stranding enables desired strength to be achieved without sacrificing ampacity.

STACIR/AW Code name	Stranding Nos.mm		Calculated sectional area mm ²		Overall diameter mm		Weight (kg/km)	UTS kN	Calculated modulus of elasticity GPa	Equivalent coefficient of linear Expansion x 10 ⁻⁶ /°C	Calculated DC resistance at 20°C Ohm/km
	STAL	Core	STAL	ACSR	STAL	Core					
600 sq mm	54/3.53	7/3.53	528.49	596.99	31.77	10.6	1,954	150.9	72.2	18.3	0.0551
480 sq mm	26/4.50	7/3.50	413.40	480.80	28.50	10.5	1,626	118.6	74.4	17.5	0.0710
380 sq mm	26/4.00	7/3.10	326.80	379.60	25.30	9.3	1,282	95.8	74.3	17.5	0.0896
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300 sq mm	30/3.20	7/3.20	241.30	297.60	22.40	9.6	1,071	84.9	78.8	16.0	0.1200
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200 sq mm	30/2.60	7/2.60	159.30	196.50	18.20	7.8	706.6	58.7	78.8	16.0	0.1820