



• Application

The STACIR/AW conductor is a new type of overhead conductor engineered to enhance transmission capacity through a unique design utilizing trapezoidal wire, thereby increasing the cross-sectional area and conductivity of the conductor. Ideal for re-conductoring applications, the STACIR/AW conductor offers a seamless solution to boost transmission line capacity without the need for tower modifications, simply by replacing the existing conductor.

• Advantages

With its INVAR core and outer layer exhibiting knee points at installation temperatures, the STACIR/AW conductor effectively minimizes sag as temperatures rise. Its mechanical strength is maintained by the INVAR core's thermal expansion coefficient above the knee point, ensuring consistent operation at temperatures up to 210°C. While this method requires skilled installation, it proves highly suitable for replacing ACSR conductors in flat terrain or areas with minimal elevation differences.

• Construction

The Super Thermal Alloy Conductor Invar Reinforced (STACIR) conductor features outer layers crafted from Super Thermal Aluminium (STAL) alloy wires, boasting a maximum operating temperature of 210°C (410°F). Complementing this, the inner core comprises INVAR wires enveloped in aluminum. Notably, the INVAR alloy consists of 36% nickel in steel, ensuring robust performance and longevity in demanding transmission applications.

• Specifications

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

• Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction. CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

• Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



• National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

● Technical Parameters

PROPERTIES	STACIR (ACSR MOOSE EQUIVALENT)		STACIR (ACSR ZEBRA EQUIVALENT)		STACIR (ACSR PANTHER EQUIVALENT)	
Typical Factors	3.53 mm	0.1390 in	3.18 mm	0.1252 in	3.00 mm	0.1181 in
Reference Specifications	IEC 62004		IEC 62004		IEC 62004	
Total Cross Section Area	597.00 mm ²	0.9254 in ²	484.50 mm ²	0.751 in ²	261.50 mm ²	0.4054 in ²
Conductive Wire	Al Zr AT3		Al Zr AT3		Al Zr AT1	
Core Wire	Aluminium clad Invar		Aluminium clad Invar		Aluminium clad Invar	
Conductor Diameter	31.77mm	1.2508 in	28.62 mm	1.1268 in	21.00 mm	0.8268 in
Weight	1993 kg/km	1339.2 lbs/mile	1582 kg/km	1063.1 lbs/mile	939 kg/km	631 lbs/mile
Ultimate Tensile Strength	14641 kg	32277.84 lbs	11968 kg	26384.89 lbs	8436 kg	18598.17 lbs
D.C. Resistance at 20°C Temperature	0.06 Ω/km	0.09Ω /mile	0.07Ω /km	0.11Ω /mile	0.13 Ω/km	0.21Ω /mile
Maximum Operating Temperature	210°C	410°F	210°C	410°F	210°C	410°F
Current Carrying Capacity at Maximum Operating Temperature	1871 Amp		1626 Amp		1040 Amp	