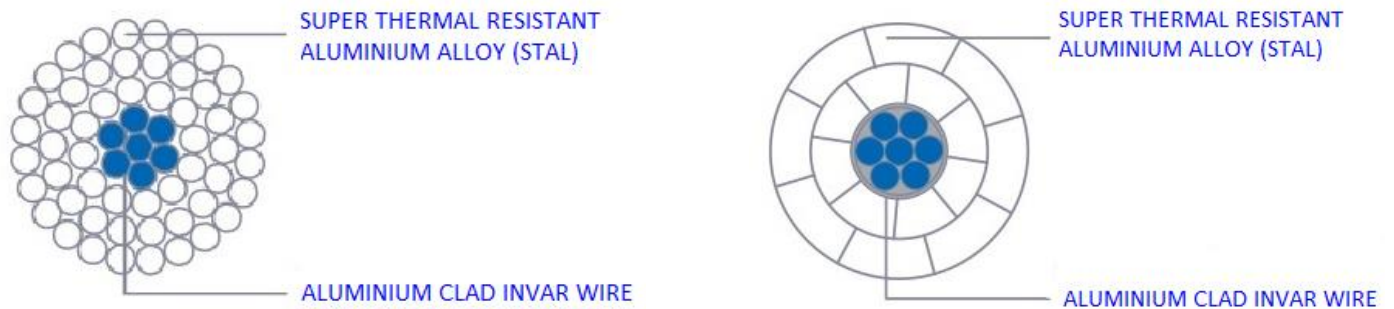


Super Thermal Alloy Conductor Invar Reinforced (STACIR)

Sterlite® Super Thermal Alloy Conductor Invar Reinforced (STACIR) conductor has outer layers composed of Super Thermal Aluminium (STAL) alloy wires that can operate up to 210°C. The inner core is composed of aluminium clad INVAR wires. INVAR is a metal alloy with 36% Ni in steel.



APPLICATION

STACIR/AW conductors are suited for re-conductoring applications. The capacity of existing transmission line can be enhanced by simply replacing the existing conductor without any modification to the tower.

BENEFITS

- Can carry 100% more current than that of ACSR of the same size, while maximum sag and maximum working tension remain the same as that of ACSR.
- No modification or reinforcement is required to existing towers for uprating transmission and distribution lines.
- Easy Installation, similar to conventional conductors.
- No Special Hardware/Accessories.
- Lower Thermal Expansion of Invar Core, Improve the Conductor Sag Performance.

TECHNICAL SPECIFICATIONS

PROPERTIES	UNIT	STACIR WOLF	STACIR PANTHER	STACIR ZEBRA	STACIR MOOSE
Appropriate System Voltage	kV	66/132 kV	132 kV	220 kV	220 kV / above
Equivalent ACSR		WOLF	PANTHER	ZEBRA	MOOSE
Reference Standards		IEC 62004, JCS 1404 ,IEC 1232,IEC 61089,IEC 62219			
Conductor diameter	mm	18.13	21.00	28.62	31.77
Weight	kg/km	700	939	1583	1950
Ultimate tensile strength	KN	61.7	81.4	122.3	150.7
DC resistance at 20°C temperature	Ohm/km	0.1762	0.1313	0.0665	0.0540
Current carrying capacity at maximum operating temperature (210)	A	844	1023	1562	1790

Note: The Catalogue conductor Parameter are informative and can be customized as per Project Requirements.

Assumptions: Ampacity is calculated based on, 45°C ambient temperature, 0.56 m/s wind velocity, 0.8 as coefficient of solar absorption, 0.45 as coefficient of emissivity and 1045 W/sq.m coefficient for solar radiation, 0 m Elevation.

Non-Specular (NS) Dull Finish Conductor can be available on special requirement.

Disclaimer:

- * Parameters mentioned in the document are indicative and can vary subject to different standards
- * Customizations are available on select products. Please indicate your interest by reaching out to the sales team

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