VOKSEL KABEL

ACCC

Aluminium Conductor Composite Core

FASTEST AND COST-EFFECTIVE WAY TO INCREASE LINE CAPACITY
HIGH-CAPACITY, HIGH- STRENGTH, LOW-SAG, AND RESISTANCE TO CORROSION
INCREASE GRID RELIABILITY AND RESILIENCE

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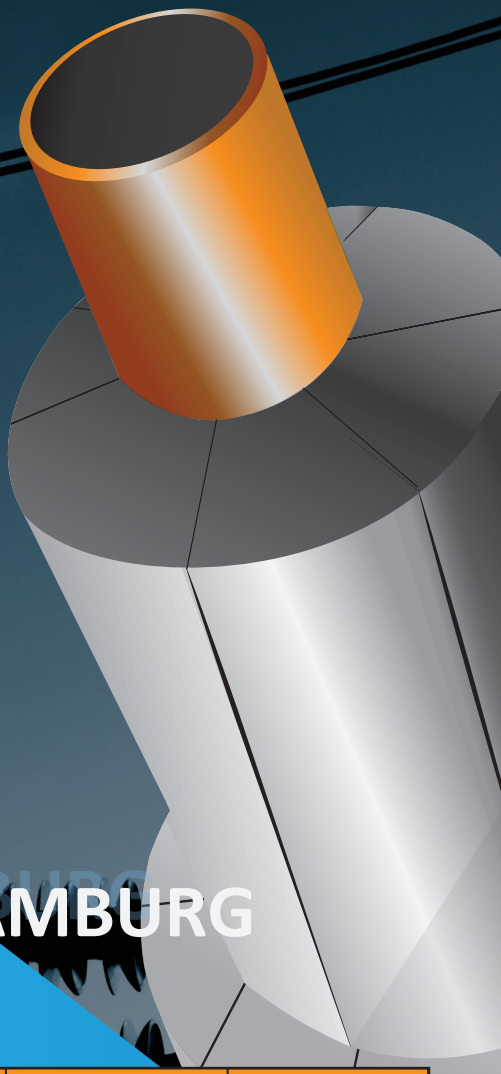


Voksel ACCC offers twice the capacity of conventional all aluminum or steel reinforced conductor with far less thermal sag. ACCC Conductor runs cooler and more efficiently than any other conductor type of the same diameter and weight. Line losses are decreased under any operating condition freeing up generation capacity assets to serve growing demand while reducing emissions.

Voksel ACCC Conductor can carry twice the current capacity and reduces line loss compared to conventional ACSR conductors. Reconductoring rapidly provides substantial power line capacity increase at the lowest cost. Reconductoring reduces permitting challenges and the need to replace existing structures, which saves time and money.

LISBON

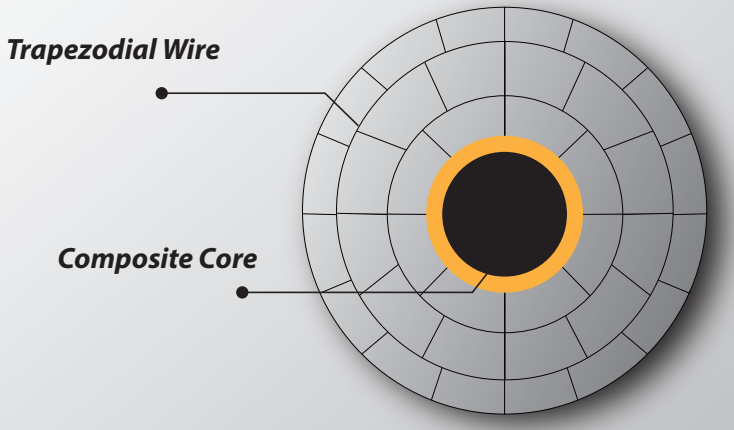
HAMBURG

AMSTERDAM

Description		Unit	ACCC Lisbon	ACCC Amsterdam	ACCC Hamburg
Cross Section		mm^2	315	360	550
Construction		mm	Core : 7.11	Core : 7.75	Core : 8.76
Overall Diameter		mm	21.78	23.55	28.62
Extreme Load Safety Strength of Conductor (80% RTS)		kN	93.2	110.6	143.2
Cross section area (Calculated)	Al	mm^2	318.7	371.3	553.5
	Core		39.7	47.2	60.3
	Total		358.4	418.5	613.8
Nominal weight		kg/km	957	1,113	1,646
Max. DC Resistance at 20 Deg. C		Ω/km	0.0888	0.0762	0.0513
Modulus of elasticity	Below Thermal Knee Point	GPa	58	58	58
	Above Thermal Knee Point		112	112	112
Coefficient of linear expansion	Below Thermal Knee Point	°C	1.61 x 10-6	1.61 x 10-6	1.61 x 10-6
	Above Thermal Knee Point		23.0 x 10-6	23.0 x 10-6	23.0 x 10-6
Allowable continuous operation temperature		°C	175	175	175
Current carrying capacity		A	1,285	1,426	1,858

*) Further Information about certain cable specification can be found on supplementary technical information

Standard Specification
ASTM B 857
ASTM B 609
Manufacturer Specification



Construction:
A concentrically stranded conductor composed of one or more layers of hard-drawn aluminum wire stranded with a high strength carbon and glass fiber core. The central carbon fiber core consists of ten of thousands of high-strength, high-modulus unidirectional carbon fibers that are surrounded by a protective layer of glass fibers. The outer glass fibers improve toughness and flexibility while also providing a galvanic barrier to prevent corrosion with the conductive aluminum strands.

Application:
Used in the overhead power transmission lines, it has double capacity of ACSR at the same conditions.