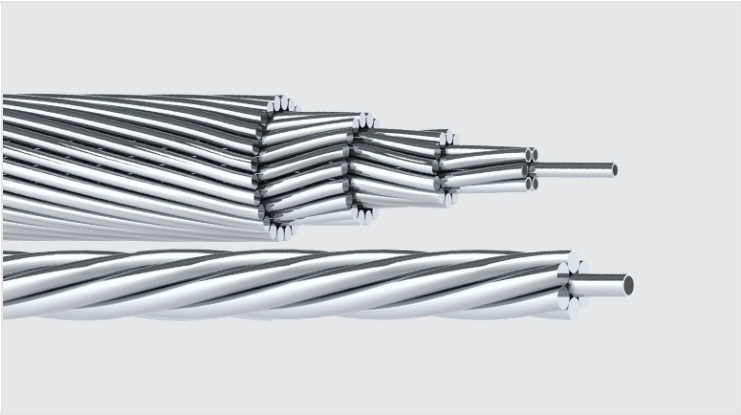


ICAL-CAA/RA - ALUMINUM CONDUCTORS WITH ALUMINUM CLAD STEEL CORE (ACSR/AW)

ICAL-176,9-CAA/RA-DOTTOREL

Description

ACSR/AW is suitable for energy transmission in urban and rural overhead lines. The CAA/RA aluminum cable is an aluminum conductor, alloy 1350 (H19 temper) stranded (class 2), concentric with an aluminum coated steel core ALUMOSTEEL, which ensures greater mechanical performance compared to bare aluminum cables and higher resistance to corrosion compared to cables with zinc plated steel core.



Datasheet

International Code	Dottorel
Cross Section (AWG/MCM)	176,9
Area	
Al (mm²)	89,410
Steel (mm²)	52,150
Total (mm²)	141,560
Formation	
Al (wires/Ø)	12 x 3,08
Steel (wires/Ømm)	7 x 3,08
Nominal Diameter of Steel Core (mm)	9,24
Nominal Diameter of Cable (mm)	15,40
Nominal Mass	
Al (kg/km)	248,00
Steel (kg/km)	345,00
Total (kg/km)	593,00
Breaking Load (kN / kgf)	75,14 / 7662
Maximum Resistance to 20°C in DC (ohms/km)	0,2704
Modulus of Elasticity to 20°C Final (Mpa)	102x10³
Coef. of Linear Thermal Expansion (1/°C)	17,4 x 10^-6
Ampacity (A)	515
Characteristics of Aluminum Wires	
Nominal Cross Section (mm²)	7,45
Minimum Conductivity (%IACS)	61,0

Average Tensile Strength - Min. (MPa)	172
Average Elongation to Breaking - Min (%)	1,8
Characteristics of Aluminum-Steel Wires	
Nominal Cross Section (mm²)	7,45
Minimum Conductivity - 20°C (%IACS)	20,3
Maximum Resistivity - 20°C (ohms.mm²/km)	-
Average Tensile Strength - Min. (MPa)	1344
Tensile Strength at 1% elongation (MPa)	1206
Average Elongation to Breaking - Min (%)	1,5
Package	
Reel Type	127/70
Nominal Length (m)	2120
Net Weight per Reel (kg)	1252,00
Gross Weight per Reel With Packing (kg)	1377,00