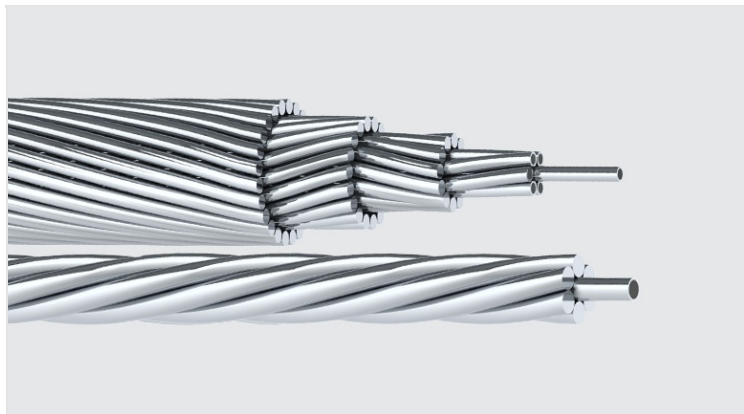


ICAL-CAA/RA - ALUMINIUM CONDUCTORS WITH ALUMINIUM CLAD STEEL CORE (ACSR/AW)

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 (mm ²)	89,410
Aço (mm ²)	52,150
Total (mm ²)	141,560
Formation	
Al (fios/Ømm)	12 x 3,08
Aço (fios/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
Aço (kg/km)	345
Total (kg/km)	593
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)	102x10 ³
Coef. of Linear Thermal Expansion (1/°C)	17,4 x 10 ⁻⁶
Ampacity (A)	515
Characteristics of Aluminium Wires	
Seção Nominal (mm ²)	7,45
Condutividade Mínima (%IACS)	61,0

Resistência à Tração Média - Mín. (MPa)	172
Along. à Ruptura Média Mín. (%)	1,8
Characteristics of Aluminium-Steel Wires	
Seção Nominal (mm ²)	7,45
Condutividade Mínima - 20°C (%IACS)	20,3
Resistividade Máxima - 20°C (ohms.mm ² /km)	
Resist. à Tração Média - Mín. (MPa)	1344
Resist. à Tração a 1% de Alongamento (MPa)	1206
Along. à Ruptura Média Mín. (%)	1,5
Package	
Tipo de Bobina	127/70
Lance Nominal (m)	2120
Massa Líq. por Bobina (kg)	1252,00
Massa Bruta da Bobina com Fechamento (kg)	1377,00