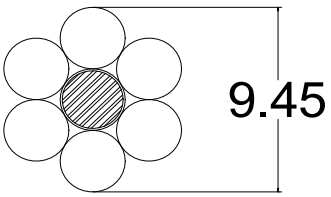
	Aluminium Conductor Aluminium Clad Steel Reinforced ACSR/AW Ø9,45mm ACS 20SA core + AL1 aluminium

SPECIFICATION: In accordance with: EN 50182
In case the numerical value in this specifications and the international standard value are different, the numerical value in this specification has priority.



CONDUCTOR PROPERTIES				
DIAMETER			[mm]	9,45
FORMATION	ACS wires		No. x Ø[mm]	1 x 3,15
	Gap		No. x Thick [mm]	- x -
	al1 wires		No. x Ø [mm]	6 x 3,15
SECTION	ACS		[mm²]	7,8
	al1		[mm²]	46,8
	Total		[mm²]	54,6
MASS	ACS		[kg/km]	51
	Grease		[kg/km]	-
	al1		[kg/km]	128
	Total		[kg/km]	179
DC RESISTANCE AT 20°C			[Ω/km]	0,5797
RATED TENSILE STRENGTH		Core	[kN]	9,35
		Total	[kN]	17,07
MODULUS OF ELASTICITY		Core	[GPa]	154
		Total	[GPa]	72
COEFF. OF LINEAR EXPANSION		Core	[10^{-6}/°C]	13,0
		Total	[10^{-6}/°C]	19,9
AMPACITY (IEC 61597)		(80 °C) *	[A]	239

* Ambient temperature 30 °C - Wind speed 0,6 m/s - Emissivity ε 0,50 - Absorptivity α 0,50 - Solar radiation 900 W/m²

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CORE PROPERTIES			
Material	Specification	EN 63248	ACS 20SA
	Stress at 1% ext.	[MPa]	1200
	Conductivity	[%IACS]	20,3%
Formation		No. x Ø[mm]	1 x 3,15
Dimension & tollerance	Wires	Ø[mm]	3,15 ± 0,04
	Core diameter	$Ø_{OUT}$ [mm]	3,15 ± 1%
Section	Wires	[mm²]	7,79
	Total	[mm²]	7,79
Mass	Total core	[kg/km]	51,4
Central wire		Ø [mm]	3,15
1st strand		No. x Ø[mm]	- x -
		Lay ratio / direction	- / -
		Strand increment %	-
2nd strand		No. x Ø[mm]	- x -
		Lay ratio / direction	- / -
		Strand increment %	-
DC resistance at 20°C		[Ω/km]	10,8982
Greased		YES/NO	NO

GAP			
Formation		No. - Position	None
Dimension & tollerance	Inner diameter	$Ø_{IN}$ [mm]	- ± -
	Outer diameter	$Ø_{OUT}$ [mm]	- ± -
Filling grease	Specification	EN 50326	
	Density	[kg/m³]	-
	Fill factor	%	-
	Mass	[kg/km]	- ± -

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CONDUCTIVE LAYERS PROPERTIES			
Material	Specification	EN 63241	AL1 aluminium
	Tensile strength	[MPa]	165
	Conductivity	[%IACS]	61,0%
Formation		No. x Thick. [mm]	6 x 3,15
Dimension & tollerance	Wires	Diameter [mm]	3,15 ± 0,04
	Inner diameter	$Ø_{IN}$ [mm]	3,15 ± 1%
	Outer diameter	$Ø_{OUT}$ [mm]	9,45 ± 1%
Section	Wires(1st strand)	[mm²]	46,76
	Wires(2nd strand)	[mm²]	-
	Wires(3rd strand)	[mm²]	-
	Total	[mm²]	46,76
Mass	Total	[kg/km]	128,0
1st strand		No. x Thick. [mm]	6 x 3,15
		Lay ratio / direction	13 / R.H.
		Strand increment %	1,289%
2nd strand		No. x Thick. [mm]	- x -
		Lay ratio / direction	- / -
		Strand increment %	-
3rd strand		No. x Thick. [mm]	- x -
		Lay ratio / direction	- / -
		Strand increment %	-
4th strand		No. x Thick. [mm]	- x -
		Lay ratio / direction	- / -
		Strand increment %	-
DC resistance at 20°C		[Ω/km]	0,6123
Greased		YES/NO	NO
Emissivity treatment		YES/NO	NO
