DATA SHEET:

ACCC® AZR STOCKHOLM 3L

ACCC®-AZR 454/60/264 (895 kcmil)*

CTC GLOBAL

For questions, please contact CTC Application Engineering Department: applicationsupport@ctcglobal.com

Metric and US Units are considered separate

Aluminum Specification	Metric		US Units	
Nominal Aluminum Cross-sectional Area***	453.7	mm^2	895.4	kcmil
Layer 1 %IACS/Aluminum Type (inner)	60%		AT3	
Layer 2 %IACS/Aluminum Type	60%		AT3	
Layer 3 %IACS/Aluminum Type	60%		AT3	
Aluminum Nominal Weight**	1257.1	kg/km	844.9	lb/kft
Coefficient of Thermal Expansion	23.0	$x10^{-6}$/°C	12.8	$x10^{-6}$/°F
Aluminum Heat Capacity	1171.0	W-s/m-C	198.3	W-s/ft-F
ACCC® Core Specification (CTC Part Number 200-008)	**Metric**		**US Units**	
Nominal Cross-sectional Area of Core	60.30	mm^2	0.0935	in^2
Nominal Diameter of Composite Core	8.76	mm	0.345	in.
Core Nominal Weight	113.0	kg/km	75.8	lb/kft
Rated Strength of Core - 313 ksi (2158 MPa)	130.2	kN	29.3	kips
Coefficient of Thermal Expansion	1.61	$x10^{-6}$/°C	0.894	$x10^{-6}$/°F
Modulus of Elasticity	112.3	GPa	16.29	Msi
Core Heat Capacity	91.9	W-s/m-°C	15.6	W-s/ft-°F
ACCC® Conductor Specification	**Metric**		**US Units**	
Overall Diameter of Conductor[1]	26.39	mm	1.039	in.
Nominal Cross-sectional Area of the Conductor	514.0	mm^2	0.797	in^2
Ultimate Tensile Strength of Conductor[2]	160.9	kN	36.2	kips
Conductor Nominal Weight**	1370.1	kg/km	920.7	lb/kft
Coefficient of Linear Expansion Above Thermal Kneepoint	1.61	$x10^{-6}$/°C	0.894	$x10^{-6}$/°F
Coefficient of Linear Expansion Below Thermal Kneepoint	18.5	$x10^{-6}$/°C	10.29	$x10^{-6}$/°F
Final Modulus of Elasticity Above Thermal Kneepoint	112.3	GPa	16.29	Msi
Final Modulus of Elasticity Below Thermal Kneepoint	62.5	GPa	9.1	Msi
Maximum Allowable Operating Temperature at Surface[3]	180	°C	356	°F
Electrical Specification	**Metric**		**US Units**	
Nominal DC Resistivity at 20°C	0.0649	ohm/km	0.1045	ohm/mile
Temperature Coefficient of Resistance	0.00400	/°C	0.00222	/°F
Frequency	50	Hz	50	Hz
AC Nominal Resistance at 25°C	0.0670	ohm/km	0.1078	ohm/mile
AC Nominal Resistance at 75°C	0.0799	ohm/km	0.1285	ohm/mile
AC Nominal Resistance at 200°C	0.1121	ohm/km	0.1804	ohm/mile
AC Current Rating at Given Temperatures[4]		1594	@ 180°C & 50 Hz	
		1681	@ 200°C & 50 Hz	
GMR (estimated)	10.73	mm	0.0352	ft.
Inductive Reactance	0.210	ohm/km	0.3384	ohm/mile
Capacitive Reactance	0.180	Mohm-km	0.1118	Mohm-mile

ACCC®-AZR is produced with high temperature resistant AT3 aluminum alloy meeting IEC 62004 or ASTM B941 specifications. Some designs may also contain layers of 1350-O (fully annealed) aluminum. See aluminum specifications above for details. Numbers after name designate the number of layers of each alloy: First number designates the number of layers with the lower tensile strenght alloy starting with the inner layer, second number designates the number of layers with the higher strength alloy on the outer layers.

1) Minimum hub diameter of the conductor reel must meet the requirements of CTC F-750-032.

2) Strength at ambient temperature. Based on 96% of the 1350-O minimum tensile strength (8.5 ksi/58.6 Mpa) and 90% of the AT3 minimum tensile sterngth (22.5 ksi/155 Mpa) and 75% of the composite core mininum tensile strength (310 ksi/2137 Mpa).

3) Maximum operating temperature of ACCC®-AZR is 180°C and a maximum emergency temperature of 200°C (10,000 hours over the life of the conductor).

4) Conditions: 2 ft/s (0.6 m/s) wind, 0 ft (0 m) Elevation, 0.5 Emis. 0.5 absorp., 25°C Ambient temp., 96 W/sq. ft (1033 W/sq. m) sun radiation

*ASTM name designation: mm² nominal aluminum area/mm² nominal core area/mm nominal diameterx10 (nominal kcmil aluminum)

**ACCC® Conductors are required to exhibit lay lengths (factors) that conform to ASTM B 857 or EN 50540.

***Different configurations among conductor manufacturers may result in slight variations within the parameters of indicated values for a given size in accordance with the stated specification.