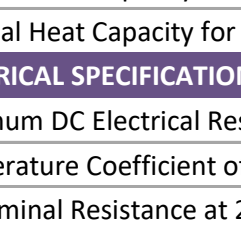
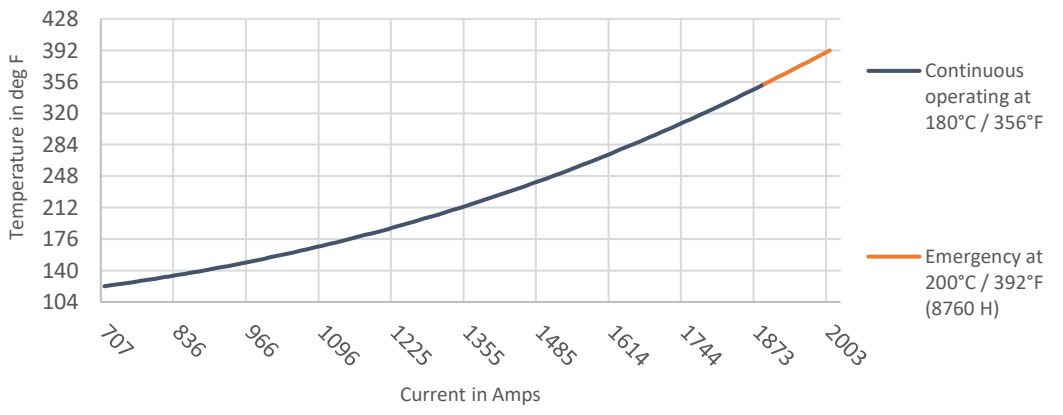
TECHNICAL DATA SHEET	Ultra Low Sag (ULS)	**ECRC® ULS 560 - 60** Epsilon Advanced Conductors	EPSILON CABLE
International size	**HAMBURG**		
ASTM Size	**PLANO**		
Technical designation	ECRC® 560-AL0/60-X1		



Governing Units: Metric to US Customary (Unit conversion)

STRANDING CONFIGURATION		Metric		US Customary	
	*No. & Diameter of the core*	1 x 8.76	mm	1 x 0.345	in.
	Aluminium layers construction / Height	33 TW x 3.31	mm	0.130	in.
	1st layer composition and Øeq	7 x 4.67	mm	0.184	in.
	2nd layer composition and Øeq	11 x 4.62	mm	0.182	in.
	3st layer composition and Øeq	15 x 4.58	mm	0.180	in.
	Lay Direction of outer layer	Right Hand (Z)			

CONDUCTOR PROPERTIES				
Cross Sectional Area - Annealed Aluminum (1350-O at 63%IACS)	551.5	mm²	1088.5	kcmil
Cross Sectional Area - Composite Core	60.3	mm²	0.0934	in.²
Total Area of Conductor Cross Section	611.8	mm²	0.9483	in.²
Nominal equivalent Aluminum Area (1350-H19 at 61%IACS)	569.6	mm²	1124.2	kcmil
Overall Diameter of Conductor	28.62	mm	1.127	in.
Mass per unit length - Annealed Aluminum	1,527.0	kg/km	1,026.1	lb/kft
Mass per unit length - Core	110.9	kg/km	74.5	lb/kft
Mass per unit length - Conductor	1,637.9	kg/km	1,100.6	lb/kft
Ultimate Tensile Strength of Conductor	189.0	kN	42.5	kips
Core Rated Tensile Strength	155.9	kN	35.0	kips
Coefficient of Linear Expansion Above Thermal Kneepoint	0.75	10^{-6} K^{-1}	0.417	10^{-6} F^{-1}
Coefficient of Linear Expansion Below Thermal Kneepoint	18.00	10^{-6} K^{-1}	10.00	10^{-6} F^{-1}
Final Modulus of Elasticity Above Thermal Kneepoint	146	GPa	21.18	Msi
Final Modulus of Elasticity Below Thermal Kneepoint	64	GPa	9.28	Msi
THERMAL SPECIFICATIONS				
Maximum Continuous Operating Temperature[2] (surface temperature)	180	°C	356	°F
Maximum Emergency Temperature / 8760 Hours[2] (surface temperature)	200	°C	392	°F
Thermal Heat Capacity for Annealed Aluminum Layers	1,458.3	W-s/m-°C	246.8	W-s/ft-°F
Thermal Heat Capacity for Composite Core	88.7	W-s/m-°C	15.0	W-s/ft-°F
ELECTRICAL SPECIFICATIONS				
Maximum DC Electrical Resistance at 20°C / 68°F *(1370-O at 63%IACS)*	0.0508	ohm/km	0.0818	ohm/mile
Temperature Coefficient of Resistance	4.03	10^{-3} K^{-1}	2.089	10^{-3} F^{-1}
AC Nominal Resistance at 25°C / 77°F (surface temperature)	0.0540	ohm/km	0.0870	ohm/mile
AC Nominal Resistance at 75°C / 167°F (surface temperature)	0.0639	ohm/km	0.1029	ohm/mile
AC Nominal Resistance at 180°C / 356°F (surface temperature)	0.0850	ohm/km	0.1367	ohm/mile
AC Nominal Resistance at 200°C / 392°F (surface temperature)	0.0890	ohm/km	0.1432	ohm/mile
AC Current Rating at 180°C / 356°F (surface temperature) [1]	1,894 A			
AC Current Rating at 200°C / 392°F (surface temperature) [1]	2,003 A			



Geometric Mean Radius (GMR)			
11.57	mm	0.0380	ft.
Inductive Reactance Ø0.3m (Ø0.98ft) radius			
0.206	Ω.km-1	0.3315	ohm/mile
Capacitive Reactance Ø0.3m (Ø0.98ft) radius			
0.175	MΩ.km	0.1087	Mohm-mile

(1) Ampacity calculations based on IEEE Standard 738-2012, according to the following data:

25 °C / 77 °F ambient temperature, 0.61 m/s (2 ft/s) wind velocity with an angle of 90 °,

1000 W/m² (92.9 W/ft²) solar radiation, 0.5 solar absorption coefficient,

0.6 emissivity coefficient, Resistance AC at 60 Hz current frequency.

(2) Temperatures defined according to ASTM B987.

Reference standards for core properties: ASTM B987.

Reference standards for electrical specifications: IEC 62219.

Reference standards for stranding parameters: ASTM B857-14/IEC 62219.

Depending on conductor manufacturer rated specifications may slightly change.

Revision 00

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