Governing Units: Metric

TS Sanford M3 11.5 (1.762) 2715



Fully Annealed AI Cross-sectional Area* 1376.00 mm² 2715.48 kcmil Encapsulated Aluminum Cross-Sectional Area 136.66 mm² 0.21182 in² Diameter of Composite Core (Exclude Encapsulation) 11.5 mm² 0.416100 in² Cross-sectional Area of Core (Exclude Encapsulation) 103.90 mm² 0.16100 in² Cross-sectional Area of the Conductor 44.755 mm 1.762 in Cross-sectional Area of the Conductor (Exclude Covering) 1479.90 mm² 2.29379 in² Ultimate Tensible Strength of Conductor 1).2) 3865.60 kN 82.19 kip Rated Strength of Core - 399 ksi (2750 MPa) 285.62 kN 64.21 kip Cord Mass per unit length (Exclude Encapsulation)* 4000.46 kg/km 126.65 lb/kft Fully Annealed AlMass per unit length (Include Encapsulation)* 3819.46 kg/km 2267.00 lb/kft Coefficient of Linear Expansion Below Thermal Kneepoint (core) 0.500 x10. ⁶ /rC 10.661 x10. ⁶ /rC Coefficient of Linear Expansion Below Thermal Kneepoint (con	Covolumny of the mount				
Encapsulated Aluminum Cross-Sectional Area 136.66 mm² 0.21182 in² Diameter of Composite Core (Exclude Encapsulation) 11.5 mm 0.45300 in² Overall Diameter of Conductor 44.755 mm² 0.16100 in² Overall Diameter of Conductor 44.755 mm 1.762 in² Cross-sectional Area of the Conductor (Exclude Covering) 1479.90 mm² 2.29379 in² Ultimate Tensile Strength of Conductor 1).2) 365.60 kN 82.19 kip Rated Strength of Core - 399 ksi (2750 MPa) 285.62 kN 64.21 kip Core Mass per unit length (include Encapsulation) 181.00 kg/km 266.00 lb/kft Conductor Mass per unit length (include Encapsulation)** 3819.46 kg/km 266.00 lb/kft Maimum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (corely conductor) 19.19 x10 ⁶ /°C 10.661 x10 ⁶ /°F Coefficient of Linear Expansion Below Thermal Kneepoint (conductor) 19.10	Mechanical Specifications	Metric		Imperial	
Diameter of Composite Core (Exclude Encapsulation) 11.5 mm 0.45300 in Cross-sectional Area of Core (Exclude Encapsulation) 103.90 mm ² 0.16100 in ² Cross-sectional Area of the Conductor (Exclude Covering) 1479.90 mm ² 2.29379 in ² Ultimate Tensile Strength of Conductor 1 , 2) 365.60 kN 82.19 kip Rated Strength of Core - 399 ksi (2750 MPa) 285.62 kN 64.21 kip Core Mass per unit length 4000.46 kg/km 2656.20 kN 64.21 kip Conductor Mass per unit length 4000.46 kg/km 268.65 lb/kft Conductor Mass per unit length 4000.46 kg/km 268.65 lb/kft Maximum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 x10 ⁶ /PC 10.661 x10 ⁶ /PC Final Modulus of Elasticity Above Thermal Kneepoint (based on core area) 15.6 GPa 21.8 Msi Auminum Heat Capacity 3527.2	Fully Annealed AI Cross-sectional Area*	1376.00	mm ²	2715.48	kcmil
Diameter of Composite Core (Exclude Encapsulation) 11.5 mm 0.45300 in Cross-sectional Area of Core (Exclude Encapsulation) 103.90 mm² 0.16100 in² Overall Diameter of Conductor 44.755 mm 1.762 in Cross-sectional Area of the Conductor (Exclude Covering) 1479.90 mm² 2.29379 in² Ultimate Tensile Strength of Conductor 1).2) 365.60 kN 82.19 kip Core Mass per unit length (Exclude Encapsulation) 181.00 kg/km 121.65 lb/kft Conductor Mass per unit length (Include Encapsulation)** 3819.46 kg/km 2667.00 lb/kft Waimum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 x10 ⁶ /PC 10.661 x10 ⁶ /PF Final Modulus of Elasticity Above Thermal Kneepoint (based on core area) 150.0 GPa 21.8 Msi Aluminum Heat Capacity 3527.2 Watts/m-*C 597.3 Watts/m-*C Core Hat Capacity 10.320 mm	Encapsulated Aluminum Cross-Sectional Area	136.66	mm ²	0.21182	in ²
Overall Diameter of Conductor 1.762 in Cross-sectional Area of the Conductor (Exclude Covering) 1479.90 mm² 2.29379 in² Ultimate Tensile Strength of Core - 399 ksi (2750 MPa) 285.62 kN 82.19 kip Rated Strength of Core - 399 ksi (2750 MPa) 285.62 kN 64.21 kip Core Mass per unit length (Exclude Encapsulation) 181.00 kg/km 121.65 lb/kft Conductor Mass per unit length (Include Encapsulation)** 3819.46 kg/km 22667.00 lb/kft Waximum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 x10.6/PC 0.278 x10.6/PC Coefficient of Linear Expansion Below Thermal Kneepoint (based on conductor) 19.190 x10.6/PC 10.661 x10.6/PC Final Modulus of Elasticity Below Thermal Kneepoint (based on conductor area) 61.6 GPa 8.9 Msi Aluminum Heat Capacity 35.00 mm 0.11811 in Core Heat Capacity 10.320 mm 0.11811	Diameter of Composite Core (Exclude Encapsulation)	11.5	1	0.45300	in
Cross-sectional Area of the Conductor (Exclude Covering) 1479.90 mm² 2.29379 in² Cross-sectional Area of the Conductor 1).2) 365.60 kN 82.19 kip Rated Strength of Core - 399 ksi (2750 MPa) 285.62 kN 64.21 kip Core Mass per unit length (Exclude Encapsulation) 181.00 kg/km 121.65 lb/kft Conductor Mass per unit length 4000.46 kg/km 2688.65 lb/kft Conductor Mass per unit length (Include Encapsulation)** 3819.46 kg/km 2567.00 lb/kft Maximum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (conductor) 19.190 x10.6 ⁶ /C 10.661 x10.6 ⁶ /F Final Modulus of Elasticity Above Thermal Kneepoint (based on core area) 150.0 GPa 8.9 Msi Auminum Heat Capacity 33.00 mm 0.11811 in Stranding Ratio 10.300 mm 0.11811 in Covered Thickness 0.000 mm 0.11811 in	Cross-sectional Area of Core (Exclude Encapsulation)	103.90	mm ²	0.16100	in ²
Ultimate Tensile Strength of Conductor 1), 2) 365.60 km 82.19 kip Rated Strength of Core - 399 ksi (2750 MPa) 285.62 kN 64.21 kip Core Mass per unit length (Exclude Encapsulation) 181.00 kg/km 121.65 lb/kft Conductor Mass per unit length (Exclude Encapsulation)** 3819.46 kg/km 2688.65 lb/kft Maximum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 x10. ⁶ /fC 10.661 x10. ⁶ /f Final Modulus of Elasticity Above Thermal Kneepoint (based on conductor area) 150.0 GPa 21.8 Msi Final Modulus of Elasticity Below Thermal Kneepoint (based on conductor area) 61.6 GPa 8.9 Msi Auminum Heat Capacity 153.6 watt-s/m.*C 597.3 watt-s/ft.*F Core Heat Capacity 10.320 10.020 Covered Thickness 0.000 mm 0.11811 in 1 DC Resistance at 20°C (Fully Annealed AI 63% IACS) 0.	Overall Diameter of Conductor	44.755	mm	1.762	in
Rated Strength of Core - 399 ksi (2750 MPa) 285.62 kN 64.21 kip Core Mass per unit length (Exclude Encapsulation) 181.00 kg/km 121.65 lb/kft Conductor Mass per unit length 4000.46 kg/km 2688.65 lb/kft Conductor Mass per unit length (Include Encapsulation)** 3819.46 kg/km 2567.00 lb/kft Maximum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 x10 ⁶ /fC 0.278 x10 ⁶ /f Final Modulus of Elasticity Above Thermal Kneepoint (based on core area) 150.0 GPa 21.8 Msi Final Modulus of Elasticity Below Thermal Kneepoint (based on conductor area) 61.6 GPa 8.9 Msi Auminum Heat Capacity 3527.2 watt-s/m-*C 26.0 watt-s/m-*C 26.0 watt-s/m-*C Stranding Ratio 1.0320 mm 0.1081 in in Covered Thickness 0.000 mm 0.000 in 0.0329 ohm/mile DC	Cross-sectional Area of the Conductor (Exclude Covering)	1479.90	mm ²	2.29379	in ²
Core Mass per unit length (Exclude Encapsulation) 181.00 kg/km 121.65 lb/kft Conductor Mass per unit length 4000.46 kg/km 2688.65 lb/kft Fully Annealed AlMass per unit length (Include Encapsulation)** 3819.46 kg/km 2688.65 lb/kft Maximum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 x10. ⁶ /°C 10.661 x10. ⁶ /°F Coefficient of Linear Expansion Below Thermal Kneepoint (conductor) 19.190 x10. ⁶ /°C 10.661 x10. ⁶ /°F Final Modulus of Elasticity Above Thermal Kneepoint (based on core area) 150.0 GPa 21.8 Msi Aluminum Heat Capacity 3527.2 Watts-/m ^{-/-} C 26.0 Watts-/ft- ^{+/-} F Core Heat Capacity 153.6 Watts-/m ^{-/-} C 26.0 Watts-/ft- ^{+/-} F Encapsulation Thickness 3.00 mm 0.11811 in Stranding Ratio 1.0320 DC Resistance at 25°C 0.0205 ohm/km 0.0336	Ultimate Tensile Strength of Conductor 1) ,2)	365.60	kN	82.19	kip
Conductor Mass per unit length 4000.46 kg/km 2688.65 lb/kft Fully Annealed AlMass per unit length (Include Encapsulation)** 3819.46 kg/km 2567.00 lb/kft Maximum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 x10 ⁻⁶ /°C 10.661 x10 ⁻⁶ /°F Coefficient of Linear Expansion Below Thermal Kneepoint (based on core area) 150.0 GPa 21.8 Msi Final Modulus of Elasticity Above Thermal Kneepoint (based on conductor area) 61.6 GPa 8.9 Msi Aluminum Heat Capacity 3527.2 Watts/m.*C 597.3 Watts/ft.*F Covered Thickness 3.00 mm 0.11811 in Stranding Ratio 1.0320 Covered Thickness 0.000 mm DC Resistance at 20°C (Fully Annealed Al 63% IACS) 0.0205 ohm/km 0.0329 ohm/mile DC Resistance at 25°C 0.0204 0.0211 ohm/km 0.0324 ohm/mile Temperature Coefficient of Resistance at 20°C 0.0245	Rated Strength of Core - 399 ksi (2750 MPa)	285.62	kN	64.21	kip
Fully Annealed AlMass per unit length (Include Encapsulation)** 3819.46 kg/km 2567.00 Ib/kft Maximum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 x10 ⁶ /°C 0.278 x10 ⁶ /°F Coefficient of Linear Expansion Below Thermal Kneepoint (conductor) 19.190 x10 ⁶ /°C 10.661 x10 ⁶ /°F Final Modulus of Elasticity Above Thermal Kneepoint (based on core area) 150.0 GPa 21.8 Msi Final Modulus of Elasticity Below Thermal Kneepoint (based on conductor area) 61.6 GPa 8.9 Msi Aluminum Heat Capacity 3527.2 Watt-s/m-*C 597.3 Watt-s/ft-*F Core Heat Capacity 153.6 Watt-s/m-*C 26.0 Watt-s/ft-*F Encapsulation Thickness 3.00 mm 0.11811 in Stranding Ratio 0.000 mm 0.000 in DC Resistance at 20°C (Fully Annealed Al 63% IACS) 0.0205 ohm/km 0.0329 ohm/mile DC Resistance at 25°C 0.0205 ohm	Core Mass per unit length (Exclude Encapsulation)	181.00	kg/km	121.65	lb/kft
Maximum Emergency Temperature at Surface 3) 200 °C 392 °F Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 x10 ⁻⁶ /°C 0.278 x10 ⁻⁶ /°F Coefficient of Linear Expansion Below Thermal Kneepoint (conductor) 19.190 x10 ⁻⁶ /°C 10.661 x10 ⁻⁶ /°F Final Modulus of Elasticity Above Thermal Kneepoint (based on core area) 150.0 GPa 21.8 Msi Aluminum Heat Capacity 3527.2 Watts/m.*C 597.3 Watts/ft.*F Core Heat Capacity 153.6 Watts/m.*C 26.0 Watts/ft.*F Encapsulation Thickness 3.00 mm 0.11811 in Stranding Ratio 1.0320 Imperial Imperial DC Resistance at 20°C (Fully Annealed Al 63% IACS) 0.0205 ohm/km 0.0329 ohm/mile DC Resistance at 25°C 0.0205 ohm/km 0.0336 ohm/mile AC Resistance at 25°C 0.02045 ohm/km 0.0433 ohm/mile AC Resistance at 25°C 0.0245 ohm/km 0.0433 ohm/mile AC Resistance at 25°C 0.0245 ohm/km 0.0433 ohm/mile	Conductor Mass per unit length	4000.46	kg/km	2688.65	lb/kft
Coefficient of Linear Expansion Above Thermal Kneepoint (core) 0.500 $x10^{-6}/^{\circ}C$ 0.278 $x10^{-6}/^{\circ}F$ Coefficient of Linear Expansion Below Thermal Kneepoint (conductor)19.190 $x10^{-6}/^{\circ}C$ 10.661 $x10^{-6}/^{\circ}F$ Final Modulus of Elasticity Above Thermal Kneepoint (based on core area)150.0GPa21.8MsiAluminum Heat Capacity3527.2Watt-s/m^*C597.3Watt-s/ft*FCore Heat Capacity153.6Watt-s/ft*F597.3Watt-s/ft*FEncapsulation Thickness3.00mm0.11811inStranding Ratio1.032010.000inCovered Thickness0.000mm0.000inDC Resistance at 20°C (Fully Annealed Al 63% IACS)0.0205ohm/km0.0329ohm/mileDC Resistance at 25°C0.0245ohm/km0.0403ohm/mileTenguency60Hz60Hz60HzAC Resistance at 25°C0.0225ohm/km0.0433ohm/mileAC Resistance at 25°C0.0225ohm/km0.0433ohm/mileAc Resistance at 25°C0.0225ohm/km0.0433ohm/mileAc Resistance at 180°C0.0282ohm/km0.0453ohm/mileAmpacity 4)3458@200°C, & A3458@200°C, & AGMR (estimated)17.89mm0.0587ftInductive Reactance (Xa: internal flux radius 1 ft)0.2138ohm/km0.344	Fully Annealed AlMass per unit length (Include Encapsulation)**	3819.46	kg/km	2567.00	lb/kft
Coefficient of Linear Expansion Below Thermal Kneepoint (conductor) 19.190 x10 ⁻⁶ /°C 10.661 x10 ⁻⁶ /°F Final Modulus of Elasticity Above Thermal Kneepoint (based on core area) 150.0 GPa 21.8 Msi Final Modulus of Elasticity Below Thermal Kneepoint (based on conductor area) 61.6 GPa 8.9 Msi Aluminum Heat Capacity 3527.2 Watt-s/m ^{-*} C 597.3 Watt-s/ft ^{*-} F Core Heat Capacity 153.6 Watt-s/m ^{+*} C 26.0 Watt-s/ft ^{*-} F Encapsulation Thickness 3.00 mm 0.11811 in Stranding Ratio 1.0320	Maximum Emergency Temperature at Surface 3)	200	°C	392	°F
Final Modulus of Elasticity Above Thermal Kneepoint (based on core area)150.0GPa21.8MsiFinal Modulus of Elasticity Below Thermal Kneepoint (based on conductor area)61.6GPa8.9MsiAluminum Heat Capacity3527.2Watts/m*C597.3Watts/ft*FCore Heat Capacity153.6Watts/m*C26.0Watts/ft*FEncapsulation Thickness3.00mm0.11811inStranding Ratio1.0320	Coefficient of Linear Expansion Above Thermal Kneepoint (core)	0.500	x10 ⁻⁶ /°C	0.278	x10 ⁻⁶ /°F
Final Modulus of Elasticity Below Thermal Kneepoint (based on conductor area)61.6GPa8.9MsiAluminum Heat Capacity3527.2Watt-s/m-°C597.3Watt-s/ft-°FCore Heat Capacity153.6Watt-s/m-°C26.0Watt-s/ft-°FEncapsulation Thickness3.00mm0.11811inStranding Ratio1.0320Covered Thickness0.000mm0.000inElectrical SpecificationsMetricImperialDC Resistance at 20°C (Fully Annealed AI 63% IACS)0.0205ohm/km0.0329ohm/mileDC Resistance at 25°C0.0209ohm/km0.0336ohm/mileDC Resistance at 75°C0.0251ohm/km0.0403ohm/mileTemperature Coefficient of Resistance at 20°C0.0245ohm/km0.0394ohm/mileAC Resistance at 25°C0.0282ohm/km0.0394ohm/mileAC Resistance at 25°C0.0282ohm/km0.0453ohm/mileAC Resistance at 25°C0.0282ohm/km0.0453ohm/mileAC Resistance at 75°C0.0282ohm/km0.0453ohm/mileAC Resistance at 180°C0.0360ohm/km0.0579ohm/mileAC Resistance at 180°C0.0360ohm/km0.0579ohm/mileAGR (estimated)17.89mm0.0587ftInductive Reactance (Xa: internal flux radius 1 ft)0.2138ohm/km0.344	Coefficient of Linear Expansion Below Thermal Kneepoint (conductor)	19.190	x10 ⁻⁶ /°C	10.661	x10 ⁻⁶ /°F
Aluminum Heat Capacity 3527.2 Watt-s/m-°C 597.3 Watt-s/ft-°F Core Heat Capacity 153.6 Watt-s/m-°C 26.0 Watt-s/ft-°F Encapsulation Thickness 3.00 mm 0.11811 in Stranding Ratio 1.0320 Covered Thickness 0.000 mm 0.000 in Electrical Specifications Metric Imperial DC Resistance at 20°C (Fully Annealed AI 63% IACS) 0.0205 ohm/km 0.0329 ohm/mile DC Resistance at 25°C 0.0209 ohm/km 0.0326 ohm/mile DC Resistance at 75°C 0.0251 ohm/km 0.0403 ohm/mile Temperature Coefficient of Resistance at 20°C 0.0245 ohm/km 0.0394 ohm/mile AC Resistance at 25°C 0.0282 ohm/km 0.0403 ohm/mile AC Resistance at 25°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 75°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 180°C <td>Final Modulus of Elasticity Above Thermal Kneepoint (based on core area)</td> <td>150.0</td> <td>GPa</td> <td>21.8</td> <td>Msi</td>	Final Modulus of Elasticity Above Thermal Kneepoint (based on core area)	150.0	GPa	21.8	Msi
Core Heat Capacity 153.6 Watt-s/m-°C 26.0 Watt-s/ft-*F Encapsulation Thickness 3.00 mm 0.11811 in Stranding Ratio 1.0320	Final Modulus of Elasticity Below Thermal Kneepoint (based on conductor area)	61.6	GPa	8.9	Msi
Encapsulation Thickness 3.00 mm 0.11811 in Stranding Ratio 1.0320 <	Aluminum Heat Capacity	3527.2	Watt-s/m-°C	597.3	Watt-s/ft-°F
Stranding Ratio1.0320IndicatorCovered Thickness0.000mm0.000inElectrical SpecificationsMetricImperialDC Resistance at 20°C (Fully Annealed AI 63% IACS)0.0205ohm/km0.0329ohm/mileDC Resistance at 25°C0.0209ohm/km0.0336ohm/mileDC Resistance at 75°C0.0251ohm/km0.0403ohm/mileTemperature Coefficient of Resistance at 20°C0.004081/°C0.002271/°FFrequency60Hz60Hz60HzAC Resistance at 25°C0.0282ohm/km0.0394ohm/mileAC Resistance at 25°C0.0245ohm/km0.0394ohm/mileAC Resistance at 25°C0.0282ohm/km0.0579ohm/mileAC Resistance at 25°C0.0360ohm/km0.0579ohm/mileAC Resistance at 25°C0.0360ohm/km0.0579ohm/mileAC Resistance at 25°C0.0360ohm/km0.0579ohm/mileAC Resistance at 180°C0.360ohm/km0.0579ohm/mileAmpacity 4)3458@200°C, & AGMR (estimated)17.89mm0.0587ftInductive Reactance (Xa: internal flux readius 1 ft)0.2138ohm/km0.344ohm/mile	Core Heat Capacity	153.6	Watt-s/m-°C	26.0	Watt-s/ft-°F
Covered Thickness 0.000 mm 0.000 in Electrical Specifications Metric Imperial DC Resistance at 20°C (Fully Annealed AI 63% IACS) 0.0205 ohm/km 0.0329 ohm/mile DC Resistance at 25°C 0.0209 ohm/km 0.0336 ohm/mile DC Resistance at 75°C 0.0251 ohm/km 0.0403 ohm/mile Temperature Coefficient of Resistance at 20°C 0.00408 1/°C 0.00227 1/°F Frequency 60 Hz 60 Hz AC Netric 0.0394 ohm/mile AC Resistance at 25°C 0.0245 ohm/km 0.0394 ohm/mile AC Resistance at 25°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 75°C 0.0282 ohm/km 0.0579 ohm/mile AC Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile Ampacity 4) 3458 @200°C, & A 3458 @200°C, & A GMR (estimated) 17.89 mm 0.0587 ft<	Encapsulation Thickness	3.00	mm	0.11811	in
Electrical SpecificationsMetricImperialDC Resistance at 20°C (Fully Annealed AI 63% IACS)0.0205ohm/km0.0329ohm/mileDC Resistance at 25°C0.0209ohm/km0.0336ohm/mileDC Resistance at 75°C0.0251ohm/km0.0403ohm/mileTemperature Coefficient of Resistance at 20°C0.004081/°C0.002271/°FFrequency60Hz60Hz60HzAC Resistance at 25°C0.0245ohm/km0.0394ohm/mileAC Resistance at 25°C0.0245ohm/km0.0453ohm/mileAC Resistance at 75°C0.0282ohm/km0.0453ohm/mileAC Resistance at 75°C0.0282ohm/km0.0579ohm/mileAC Resistance at 180°C0.0360ohm/km0.0579ohm/mileAmpacity 4)3258@2100°C, & A3458@200°C, & AGMR (estimated)17.89mm0.0587ftInductive Reactance (Xa: internal flux+external flux radius 1 ft)0.2138ohm/km0.344ohm/mile	Stranding Ratio	1.0320			
DC Resistance at 20°C (Fully Annealed AI 63% IACS) 0.0205 ohm/km 0.0329 ohm/mile DC Resistance at 25°C 0.0209 ohm/km 0.0336 ohm/mile DC Resistance at 75°C 0.0251 ohm/km 0.0403 ohm/mile Temperature Coefficient of Resistance at 20°C 0.00408 1/°C 0.00227 1/°F Frequency 60 Hz 60 Hz 60 Hz AC Resistance at 25°C 0.0245 ohm/km 0.0394 ohm/mile AC Resistance at 25°C 0.0245 ohm/km 0.0394 ohm/mile AC Resistance at 75°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile Ampacity 4) 3258 @180°C, & A 3458 @2200°C, & A GMR (estimated) 17.89 mm 0.0587 ft Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.3444 ohm/mile	Covered Thickness	0.000	mm	0.000	in
DC Resistance at 25°C 0.0209 ohm/km 0.0336 ohm/mile DC Resistance at 75°C 0.0251 ohm/km 0.0403 ohm/mile Temperature Coefficient of Resistance at 20°C 0.00408 1/°C 0.00227 1/°F Frequency 60 Hz 60 Hz AC Resistance at 25°C 0.0245 ohm/km 0.0394 ohm/mile AC Resistance at 75°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 75°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile Ampacity 4) 3258 @180°C, & A 3458 @200°C, & A GMR (estimated) 17.89 mm 0.0587 ft Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344 ohm/mile	Electrical Specifications	Metric		Imperial	
DC Resistance at 75°C 0.0251 ohm/km 0.0403 ohm/mile Temperature Coefficient of Resistance at 20°C 0.00408 1/°C 0.00227 1/°F Frequency 60 Hz 60 Hz AC Resistance at 25°C 0.0245 ohm/km 0.0394 ohm/mile AC Resistance at 75°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile AC Resistance at 180°C 0.3360 ohm/km 0.0579 ohm/mile AC Resistance at 180°C 17.89 mm 0.0587 ft Ampacity 4) 17.89 mm 0.0587 ft Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344 ohm/mile	DC Resistance at 20°C (Fully Annealed AI 63% IACS)	0.0205	ohm/km	0.0329	ohm/mile
Temperature Coefficient of Resistance at 20°C 0.00408 1/°C 0.00227 1/°F Frequency 60 Hz 60 Hz 60 Hz AC Resistance at 25°C 0.0245 ohm/km 0.0394 ohm/mile AC Resistance at 75°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile Ampacity 4) 3258 @180°C, & A @200°C, & A GMR (estimated) 17.89 mm 0.0587 ft Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344 ohm/mile	DC Resistance at 25°C	0.0209	ohm/km	0.0336	ohm/mile
Frequency 60 Hz 60 Hz AC Resistance at 25°C 0.0245 ohm/km 0.0394 ohm/mile AC Resistance at 75°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile Ampacity 4) 3258 @180°C, & A GMR (estimated) 17.89 mm 0.0587 ft Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344 ohm/mile	DC Resistance at 75°C	0.0251	ohm/km	0.0403	ohm/mile
AC Resistance at 25°C 0.0245 ohm/km 0.0394 ohm/mile AC Resistance at 75°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile Ac Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile Ampacity 4) 3258 @180°C, & A GMR (estimated) 17.89 mm 0.0587 ft Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344 ohm/mile	Temperature Coefficient of Resistance at 20°C	0.00408	1/°C	0.00227	1/°F
AC Resistance at 75°C 0.0282 ohm/km 0.0453 ohm/mile AC Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile Ampacity 4) 3258 @180°C, & A GMR (estimated) 17.89 mm 0.0587 ft Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344 ohm/mile	Frequency	60	Hz	60	Hz
AC Resistance at 180°C 0.0360 ohm/km 0.0579 ohm/mile Ampacity 4) 3258 @180°C, & A GMR (estimated) 3458 @200°C, & A Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344	AC Resistance at 25°C	0.0245	ohm/km	0.0394	ohm/mile
Ampacity 4) 3258 @180°C, & A GMR (estimated) 3458 @200°C, & A Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344	AC Resistance at 75°C	0.0282	ohm/km	0.0453	ohm/mile
Ampacity 4) 3458 @200°C, & A GMR (estimated) 17.89 mm 0.0587 ft Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344 ohm/mile	AC Resistance at 180°C	0.0360	ohm/km		
GMR (estimated)17.89mm0.0587ftInductive Reactance (Xa: internal flux+external flux radius 1 ft)0.2138ohm/km0.344ohm/mile	Ampacity 4)		3258		
Inductive Reactance (Xa: internal flux+external flux radius 1 ft) 0.2138 ohm/km 0.344 ohm/mile			3458	@200	°C, & A
	GMR (estimated)	17.89	mm	0.0587	ft
Capacitive Reactance 0.1247 Mohm-km 0.077 Mohm-mile	Inductive Reactance (Xa: internal flux+external flux radius 1 ft)	0.2138	ohm/km	0.344	ohm/mile
	Capacitive Reactance	0.1247	Mohm-km	0.077	Mohm-mile

*TS Sanford M3 11.5 (1.762) 2715 conductor is produced with Fully Annealed Al aluminum. The nominal Aluminum equivaeInt area is 1376 sq. mm (2715.5 kcmil)

**TS® Conductors are required to exhibit lay lengths (ratios) that conform to established ACSR and ACSS standards.

1) Fully Annealed AI rated tensile strength based on applicable standard. Core tensile strength based on 100% of its strength.

2) Strength at ambient temperature, Strength may be reduced to Rated Core Strength when temperature is above knee point

3) Maximum continuous operating temperature of TS Sanford M3 11.5 (1.762) 2715 is 180°C and a maximum emergency temperature of 200°C

4). Ampacity based on: 25°C ambient temperature, 2ft/s (0.6 m/s) perpendicular wind, 0.5 Emis 0.5 Absorb.60 Hz, sea level (0) elevation, 30°N line Azimuth, noon on June 10th (96W/sq.ft, 1033W/sq.m), clear atmosphere

The information contained herein is offered in good faith. All values are nominal unless specifically indicated as maximum or minimum. The actual configuration of a given size may vary between conductor manufacturers and may result in slight variations in some of the indicated values. Data herein is to be considered confidential and proprietary to TS Conductor

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