

CONTACT

Market information
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Control cables UL Type WTTC & TC

UL Subject 2277 & UL Standard 1277

STANDARDS

Product UL 1277; UL 2277

Application

Nexans Wind Turbine Tray Cable WINDLINK® LV-UL WTTC was specifically designed to withstand extreme conditions encountered in wind turbine applications.

Product characteristics

- Flame-retardant acc. to CSA FT4 (Vertical Tray)
- Oil-resistant acc. to UL OIL RES I
- UV resistant
- Suitable for torsional applications in wind turbines
- Low transfer impedance

Approvals

- UL MTW
- UL TC-ER 90°C 600V
- UL WTTC 90°C 1000V
- UL DP-1
- UL AWM 600V

CHARACTERISTICS

Construction characteristics

Construction type	7 G 1.5
Conductor material	Soft annealed copper
Insulation	PVC compound
Individual sheath	Nylon jacketing compound
Insulation colour	Black w. number + yellow/green
Screen	Tinned copper braid
Taping	Aluminium / Polyester tape
Outer sheath	Special PVC compound
Inner sheath	Non-hygroscopic tape
Sheath colour	Black - RAL 9005

Dimensional characteristics

Number of cores	7
Conductor cross-section	1.5 mm ²
Insulation sheath thickness	0.38 mm
Nominal outer diameter	11.0 mm
Approximate weight	228 kg/km
Copper content	143 kg/km
Inner sheath thickness	- mm
Maximum cable diameter	- mm
Minimum cable diameter	- mm
Nominal outer sheath thickness	- mm

Electrical characteristics

Nominal resistance of the conductor	13.30 Ohm/km
Test voltage	2500 V
Insulation resistance at 20°C	20 MOhm.km
Inductive reactance	- Ohm/km
Max. Electrical Resistance AC 60Hz 70°C	- Ohm/km
Max. Electrical Resistance AC 60Hz 90°C	- Ohm/km
Nominal Voltage	600 V
Permissible current rating in open air	- A
Permissible short circuit current	- kA

Mechanical characteristics

Tensile strength	- N
Maximum tensile load	- N
Torsion stress	100 °/m

Usage characteristics

Ambient dynamic operating temperature, range	-5 ... 90 °C
Ambient static operating temperature, range	-40 ... 90 °C
Oil resistance	Oil resistance I
Minimum bending radius, occasionally moving	8 (xD)
Minimum bending radius, fixed installation	4 (xD)
Flame retardant	UL 1581 SEC. 1160 AND CSA FT4

Usage characteristics

Gases corrosivity	-
Installation temperature, range	- °C
Max. conductor temperature in service	- °C
Ozone resistance	-
Short-circuit max. conductor temperature	- °C
U.V resistance	-

WORKING VOLTAGE

- UL AWM 600V
- UL TC-ER / MTW 600V
- UL WTTC 1000V

SELLING AND DELIVERY INFORMATION

Marking

E219385 - CE - Week/Year of production - TYPE WTTC / THHN or THWN 90°C 1000V or MTW 90°C 600 V - n x/G yy
mm²/AWG size

n: number of conductors

x/G: without/with Yellow/Green conductor

yy: section of conductor

Meter marking