



Product: 29528F

VFD 100% Gnd, 3C #1 Str TC XLPO Ins + #1 Symm. Seg. Gnd (3 of #6) Str TC CTS, Blk TPE Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V WTTC

Product Description

Belden 100% Ground Extra Flexible VFD, 3 Conductor 1AWG (19x44x30) Tinned Copper XLPO Insulation M4 Color Code + 1AWG Symmetrical Segmented Ground (3 of 6AWG) Tinned Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black TPE Outer Jacket, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V WTTC 600V CIC TC SUN RES OIL RES I&II DIR BUR

Technical Specifications

Product Overview

Suitable Applications:		AC	Motor drives, VFD, Va	riable Frequency drives	
Physical Characteristics (Overall)					
Conductor					
Conductor					
Conductor Element	AWG	Stranding	Material	No. of Conductors	
	AWG	Stranding 19x44x30	Material TC - Tinned Coppe		

Insulation

Conductor Count:

Material	Nominal Wall Thickness
XLPE - Cross Linked Polyethylene	0.057 in

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3

Outer Shield Material

Type	Layer	Material	Coverage [%]
Tape	1	Spiral Copper	100 %
Tape	2	Spiral Copper	100 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	1.243 in	0.083 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
.13 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
44 pF/ft	79 pF/ft

Inductance

Nominal Inductance 0.146 µH/ft

Current

Max. Recommended Current [A]

145 Amps per conductor @ 30°C (per NEC)

Voltage

UL Voltage Rating	
1000 V RMS (Flexible Motor Supply Cable)	

Temperature Range

UL Temp Rating:	90°C Dry, 90°C Wet
Operating Temp Range:	-40C To +90C Wet/Dry
Wet Temp Range:	-40°C To +90 °C

Mechanical Characteristics

Oil Resistance:	Yes - Oil Res II
Bulk Cable Weight:	1439 lbs/1000ft
Max Recommended Pulling Tension:	2650 lbs
Min Bend Radius/Minor Axis:	6.2 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, WTTC, XHHW-2
CEC/C(UL) Specification:	600V Type CIC TC
Other Specification:	1000V UL Flexible Motor Supply

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-10-13
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202, 383 Vertical Tray Flame Test (70,000 BTU)
UL voltage rating:	1000 V RMS (Flexible Motor Supply Cable)

Part Number

Variants

Item #	Color	UPC	Length
29528F 0103000	Black	612825373384	3,000 ft

History

Update and Revision:	Revision Number: 0.119 Revision Date: 09-10-2019

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