

Product: 29530

VFD 100% Gnd, 3C #2/0 Str TC XLPO Ins + #2/0 Symm. Seg. Gnd (3 of #4+) Str BC, CTS, Blk PVC Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable

Request Sample

Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 2/0AWG (7x19x20) Tinned Copper XLPO Insulation M4 Color Code + 2/0AWG Symmetrical Segmented Ground (3 of 4AWG+) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black PVC Outer Jacket, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V CSA AWM I/II A/B 600V RW90 TC SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

Suitable Applications:	AC Motor drives, VFD, Variable Frequency drives

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductors	2/0	7x19x20	TC - Tinned Copper	3
Segmented Ground Wire	2/0	133x25	BC - Bare Copper	1

Conductor Count:	3

Insulation

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	Description	Layer	Material	Coverage [%]
Tape	.002"	1	Spiral Copper	100 %
Tape	.002"	2	Spiral Copper	100 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	1.398 in	0.083 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
0.079 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
46 pF/ft	83 pF/ft

Inductance

Nominal Inductance
0.141 µH/ft

Current

Max. Recommended Current [A]
195 Amps per conductor @ 30°C

Voltage

Description	UL Voltage Rating	Voltage Rating [V]
CSA AWM I/II A/B	1000 V RMS	1000 V RMS
	600 V RMS (Type TC)	

Temperature Range

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

Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	2148 lbs/1000ft
Max Recommended Pulling Tension:	4200 lbs
Min Bend Radius/Minor Axis:	14 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, WTTC, XHHW-2
CEC/C(UL) Specification:	TC
CSA AWM Specification:	AWM I/II A/B
PMSHA Specification:	P-07-KA070003
Other Specification:	1000V UL Flexible Motor Supply Cable

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):	2005-11-09
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

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

Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	RW90, FT4
UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202, 383
UL voltage rating:	1000 V RMS (Flexible Motor Supply Cable)

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	UPC	Length	Footnote
29530 0102000	Black	612825138068	2,000 ft	C Z

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

History

Update and Revision:	Revision Number: 0.324 Revision Date: 09-10-2019

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