



Product: [29530C](#)

VFD, 3C #2/0 Str BC XLPE Ins + #5 Symm. Seg. Gnd (3 of #10) Str BC, CTS, Blk PVC Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B

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Product Description

Belden Basics VFD, 3 Conductor 2/0AWG (19x12) Bare Copper XLPE Insulation M4 Color Code + 5AWG Symmetrical Segmented Ground (3 of 10AWG) Bare Copper Stranded in Continuous Contact with Overall Dual Copper Tape Helically Applied Shield, Black PVC Outer Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

Suitable Applications:	Variable Frequency Drives (VFD); AC Motor and Drive Systems; Class 1 Division 2 Hazardous Locations
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Construction Details

Conductor					
Element	No. of Elements	Size	Stranding	Material	Notes
Conductor(s)	3	2/0 AWG	19x12	BC - Bare Copper	ASTM B3 Copper B8 Class B Stranding
Ground Wire	3	10 AWG	7x18	BC - Bare Copper	Segmented Ground (3 Total 5AWG)

Insulation				
Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLPO - Crosslink Polyolefin	0.057 in (1.4 mm)	0.516 in (13.1 mm)	ICEA Chart M4
Ground Wire	No Insulation			

Outer Shield		
Shield Type	Material	Coverage
Helical Tape	Bare Copper (BC)	100%
Helical Tape	Bare Copper (BC)	100%

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.083 in (2.1 mm)	1.305 in (33.15 mm)	Yes

Overall Cable Diameter (Nominal):	1.305 in (33.15 mm)
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Electrical Characteristics

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.082 Ohm/1000ft	32 pF/ft (100 pF/m)	57 pF/ft (190 pF/m)	50 Ohm	55%	195 Amps per Conductor at 30°C (per NEC)
	0.030 Ohm/1000ft (0.098 Ohm/km)					

Voltage
UL Voltage Rating
1000 V (TC-ER)

Mechanical Characteristics

Temperature

UL Temperature	Operating
90°C Dry, 90°C Wet	-40°C To +90°C

Bend Radius

Stationary Min.	Installation Min.
15.7 in (399 mm)	15.7 in (399 mm)

Max. Pull Tension:	5301 lbs (2404 kg)
Bulk Cable Weight:	1724 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL 1685 UL Loading, IEEE 1202 FT4, FT4
NEC / UL Compliance:	Article 336, TC-ER, XHHW-2
ICEA Compliance:	S-95-658
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	P-07-KA070003-MSHA

History

Update and Revision:	Revision Number: 0.651 Revision Date: 05-22-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
29530C 0102000	Black	Reel	2,000 ft	612825138105

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