



Product: [29561C](#)

VFD, 3C #4/0 Str BC XLPE Ins + #3 Symm. Seg. Gnd (3 of #8) Str BC, CTS, Bk PVC Jkt, 1000V CSA TC C22.2 #230 C22.2 #38

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Product Description

Belden Basics CSA VFD, 3 Conductor 4/0AWG (19x10) Bare Copper XLPE Insulation M4 Color Code + 3AWG Symmetrical Segmented Ground (3 of 8AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black PVC Outer Jacket, 1000V CSA TC C22.2 #230 C22.2 #38 SUN RES DIR BUR Oil Resistance

Technical Specifications

Product Overview

Suitable Applications:	Variable Frequency Drives (VFD); AC Motor and Drive Systems; Specific ratings for applications in Canada
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material	Notes
Conductor(s)	3	4/0 AWG	19x10	BC - Bare Copper	
Ground	3	8 AWG	7x16	BC - Bare Copper	Segmented Grounds

Insulation

Element	Material	Nom. Thickness	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.085 in (2.2 mm)	Black and Numbered
Ground	No Insulation		

Outer Shield

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

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.093 in (2.4 mm)	1.681 in (42.70 mm)	Yes

Overall Cable Diameter (Nominal):	1.681 in (42.70 mm)
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.052 Ohm/1000ft (0.17 Ohm/km)	33 pF/ft (110 pF/m)	60 pF/ft (200 pF/m)	56 Ohm	55%	260 Amps per Conductor at 30°C

Voltage

UL Voltage Rating
1000 V (CSA TC)

Mechanical Characteristics

Temperature

Operating

-40°C To 90°C

Bend Radius

Stationary Min.	Installation Min.
20.2 in (513 mm)	20.2 in (513 mm)

Max. Pull Tension:	7814 lbs (3544 kg)
Bulk Cable Weight:	2767 lbs/1000ft (4118 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	1202, 383 Vertical Tray Flame Test (70,000 BTU)
CEC / C(UL) Compliance:	TC, RW90, C22.2 #230, #38
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)

History

Update and Revision:	Revision Number: 0.347 Revision Date: 05-31-2024
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