



Product: [29527](#)

VFD, 3C #2 Str TC XLPE Ins + #10 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

[Request Sample](#)

Product Description

Belden Premium VFD, 2 AWG (7 x 19 x 23) Tinned Copper, 3 Conductor, XLPE Insulation M4 Color Code, With 3 #10 AWG (105 x 30) Bare Copper Drain Wire, Overall Copper Tape Applied Sheild, Black Outer PVC Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V, CSA AWM I/II A/B Sun Res Dir Bur Oil Res II.

Technical Specifications

Product Overview

Suitable Applications:	Variable Frequency Drives (VFD); AC Motor and Drive Systems; Class 1 Division 2 Hazardous Locations; Recommended Cable Gland Belden BTC125A1271RA
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material	Notes
Conductor(s)	3	2 AWG	7x19x23	TC - Tinned Copper	ASTM B3 Copper B8 Class B Stranding
Segmented Ground Wire	3	10 AWG	105x30	TC - Tinned Copper	Segmented Ground (3 Totaling 5 AWG)

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLP, XLPO, XLPE (Thermoset)	0.047 in (1.2 mm)	0.424 in (10.8 mm)	ICEA Chart M4
Ground Wire	No Insulation			

Outer Shield

Shield Type	Material	Coverage	Notes
Tape	Bare Copper (BC)	100%	2 Mil Copper Tape
	Bare Copper (BC)		

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.083 in (2.1 mm)	1.090 in (27.69 mm)	Yes

Overall Cable Diameter (Nominal):	1.09 in (27.7 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 Impedence	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.14 Ohm/1000ft (0.46 Ohm/km)	35 pF/ft (110 pF/m)	68 pF/ft (220 pF/m)	44 Ohm	55%	130 Amps per Conductor at 30°C
	0.03 Ohm/1000ft (0.098 Ohm/km)					

Voltage

UL Voltage Rating
600/1000 V (TC-ER)

Mechanical Characteristics

Temperature

UL Temperature	Operating
90°C Dry, 90°C Wet	-20°C To +90°C

Bend Radius

Stationary Min.	Installation Min.
10.9 in (277 mm)	10.9 in (277 mm)

Max. Pull Tension:	2851 lbs (1293 kg)
Bulk Cable Weight:	969 lbs (440 kg)

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 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: 0.23 Revision Date: 05-05-2025
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