



Product: [29521](#)

VFD, 3C #14 Str TC XLPE Ins + #18 Symm. Seg. Gnd (3 of #18) Str TC, CTS, OS +TC Brd, Blk PVC Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B

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Product Description

Belden Premium VFD, 12 AWG (41 x 30) Tinned Copper, 3 Conductor, XLPE Insulation M4 Color Code, Duofoil Beldfoil Shield With 3 #18 AWG (41 x 34) Tinned Copper Drain Wire, Overall Beldfoil® (100%) + Tinned Copper Braid Coverage (85%), Black Outer PVC 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; Recommended Cable Gland Belden BTC075A0791RA
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material	Notes
Conductor(s)	3	14 AWG	41x30	TC - Tinned Copper	ASTM B3 Copper B8 Class B Stranding
Ground Wire	3	18 AWG	41x34	TC - Tinned Copper	Segmented Ground 18AWG

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLPO - Crosslink Polyolefin	0.030 in (0.76 mm)	0.032 in (0.81 mm)	ICEA Chart M4
Ground				

Outer Shield

Shield Type	Material	Coverage
Tape	Tinned Copper (TC)	100%
Braid	Tinned Copper (TC)	85%

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.047 in (1.2 mm)	0.42 in (11 mm)	Yes

Overall Cable Diameter (Nominal):	0.42 in (11 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)	2.282 Ohm/1000ft (7.487 Ohm/km)	23.0 pF/ft (75.5 pF/m)	42 pF/ft (140 pF/m)	80 Ohm	55%	25 Amps per Conductor at 30°C
Ground	1.9 Ohm/1000ft (6.2 Ohm/km)					

Voltage

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

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
3.15 in (80.0 mm)	3.15 in (80.0 mm)

Max. Pull Tension:	186 lbs (84.4 kg)
Bulk Cable Weight:	136 lbs/1000ft (202 kg/km)

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
NEC / UL Compliance:	Article 336, TC, 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)

History

Update and Revision:	Revision Number: 0.30 Revision Date: 05-05-2025
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