



Product: [29524C](#)

VFD, 3C #8 Str BC XLPE Ins + #10 Symm. Seg. Gnd (3 of #14) 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 Basics VFD, 3 Conductor 8AWG (7x16) Bare Copper XLPE Insulation M4 Color Code + 10AWG Symmetrical Segmented Ground (3 of 14AWG) Bare Copper Stranded, Overall Dual Copper Tapes 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
------------------------	---

Construction Details

Conductor

Element	Number of Element	AWG	Stranding	Material	Notes
Conductor(s)	3	8	7x16	BC - Bare Copper	
Ground	3	14	7x22	BC - Bare Copper	Segmented Grounds

Insulation

Element	Material	Thickness	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.047 in (1.2 mm)	Black and Numbered
Ground	No Insulation		

Outer Shield

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

Outer Jacket

Material	Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.063 in (1.6 mm)	0.646 in (16.4 mm)	Yes

Cable Diameter (Nominal):	0.646 in (16.4 mm)
---------------------------	--------------------

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)	0.564 Ohm/1000ft (1.85 Ohm/km)	37 pF/ft (120 pF/m)	67 pF/ft (220 pF/m)	50 Ohm	55%	55 Amps per Conductor at 25°C

Voltage

UL Voltage Rating
1000 V (TC, CSA AWM I/II A/B)

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
7.8 in (200 mm)	7.8 in (200 mm)

Max. Pull Tension:	819 lbs (371 kg)
Bulk Cable Weight:	350 lbs/1000ft (520 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Fire Resistance:	UL 1685 UL Loading, FT4, 1202, 383 Vertical Tray Flame Test (70,000 BTU)
NEC / UL Compliance:	Article 336, TC-ER, XHHW-2
AWM Compliance:	I/II A/B
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: 0.438 Revision Date: 07-06-2021
----------------------	--

© 2021 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.