

Product: 29724C

VFD, 3C #8 Str BC XLPE Ins + #10 Symm. Seg. Gnd (3 of #14) Str BC, CTS, Blk PVC Jkt, 2000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B

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, 2000V 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; High voltage requirements

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material	Notes
Conductor(s)	3	8 AWG	7x16	BC - Bare Copper	
Ground	3	14 AWG	7x22	BC - Bare Copper	Segmented Grounds

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.072 in (1.8 mm)	0.286 in (7.26 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	0.083 in (2.1 mm)	0.794 in (20.2 mm)	Yes

Overall Cable Diameter (Nominal):	0.794 in (20.2 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)	21 pF/ft (69 pF/m)	38 pF/ft (120 pF/m)	90 Ohm	55%	55 Amps per Conductor at 30ºC

Voltage

UL Voltage Rating
2000 V (TC), 1000 V (CSA AWM I/II A/B)

Mechanical Characteristics

Temperature

UL Temperature	Operating

90°C Dry, 90°C Wet	-40°C To +90°C

Bend Radius

Stationary Min.	Installation Min.
9.5 in (240 mm)	9.5 in (240 mm)

Max. Pull Tension:	819 lbs (371 kg)
Bulk Cable Weight:	444 lbs/1000ft (661 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1685 UL Loading, 1202, 383 Vertical Tray Flame Test (70,000 BTU)
NEC / UL Compliance:	Article 336, TC-ER, RHW-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: 0.71 Revision Date: 03-27-2024

Part Numbers

Variants

Item #	Putup Type	UPC
29724C 0102500	Reel	612825445494
29724C 0105000	Reel	612825445500

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