Product: 29503

VFD 300% Gnd, 3C+G #10 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#10 TC Drain, Blk PVC Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

Request Sample

Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 10AWG (105x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/10AWG Tinned Copper Ground/Drain, Black PVC Outer Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC 1000V CSA AWM I/II A/B 600V CIC TC SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

Suitable Applications:	Variable Frequency Drives (VFD); AC Motor and Drive Systems; Recommended Cable Gland Belden BTC100A0791RA

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	10 AWG	105x30	TC - Tinned Copper
Insulated Ground	1	10 AWG	105x30	TC - Tinned Copper
Uninsulated Ground Wire	1	10 AWG	105x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.046 in (1.2 mm)	0.212 in (5.38 mm)	ICEA Chart M4
Insulated Ground	PVC - Polyvinyl Chloride	0.046 in (1.2 mm)	0.212 in (5.38 mm)	Green/Yellow Stripe
Uninsulated Ground Wire				

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Tri-Laminate (Alum+Poly+Alum)	100%	10 AWG (105x30) TC
Braid	Tinned Copper (TC)	85%	

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.073 in (1.9 mm)	0.690 in (17.5 mm)	Yes

Overall Cable Diameter (Nominal):	0.690 in (17.5 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Inductance Cond-Grnd	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.969 Ohm/1000ft	23 pF/ft (75 pF/m)	42 pF/ft (140 pF/m)	80 Ohm	0.173 µH/ft	55%	40 Amps per Conductor at 30ºC (per NEC)
Insulated Ground	1.080 Ohm/1000ft (3.543 Ohm/km)						
Uninsulated Ground Wire							

Voltage

UL Voltage Rating	Voltage Rating

1000 V (TC-ER, WTTC, UL44, UL Flexible Motor Supply Cable), 600 V (C(UL) CIC TC)	1000 V (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.
8.3 in (210 mm)	8.3 in (210 mm)

Max. Pull Tension:	762 lbs (346 kg)
Bulk Cable Weight:	353 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL 1685 UL Loading, FT4, IEEE 1202 FT4
NEC / UL Compliance:	Article 336, TC-ER, WTTC, UL Flexible Motor Supply Cable
AWM Compliance:	AWM I/II A/B
CEC / C(UL) Compliance:	CIC, TC
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: 0.648 Revision Date: 06-21-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
29503 010100	Black	Reel	100 ft	612825136880	
29503 010250	Black	Reel	250 ft	612825136910	C Z
29503 010500	Black	Reel	500 ft	612825136941	C Z
29503 0101000	Black	Reel	1,000 ft	612825136897	C Z
29503 0105000	Black	Reel	5,000 ft	612825136958	C Z

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