

Product: 29504

VFD 300% Gnd, 3C+G #8 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/4-#14 TC Drains, 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 8AWG (7x19x29) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/4-14AWG Tinned Copper Drains, 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

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	8 AWG	7x19x29	TC - Tinned Copper
Ground Wire	1	8 AWG	7x19x29	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLP, XLPO, XLPE (Thermoset)	0.062 in (1.6 mm)	0.278 in (7.06 mm)	ICEA Chart M4
Ground Wire	PVC - Polyvinyl Chloride	0.062 in (1.6 mm)	0.278 in (7.06 mm)	Green/Yellow Stripe

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Tri-Laminate (Alum+Poly+Alum)	100%	14 AWG (41x30) TC
Braid	Tinned Copper (TC)	85%	

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.095 in (2.4 mm)	0.901 in (22.9 mm)	Yes

Overall Cable Diameter (Nominal):	0.901 in (22.9 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.599 Ohm/1000ft	26 pF/ft (85 pF/m)	47 pF/ft (150 pF/m)	47 pF/ft (150 pF/m)	71 Ohm	55%	55 Amps per Conductor at 30ºC (per NEC)
	0.6795 Ohm/1000ft (2.229 Ohm/km)						55 Amps per Conductor at 30ºC (per NEC)

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.
10.8 in (274 mm)	10.8 in (274 mm)

Max. Pull Tension:	1011 lbs (458.6 kg)
Bulk Cable Weight:	564 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: 0.616 Revision Date: 05-31-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
29504 010250	Black	Reel	250 ft	612825137030	C Z
29504 010500	Black	Reel	500 ft	612825137078	C Z
29504 0101000	Black	Reel	1,000 ft	612825137016	C Z
29504 0105000	Black	Reel	5,000 ft	612825137085	C Z

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