

Product: 29502

VFD 300% Gnd, 3C+G #12 Str TC,XLPE Ins+PVC Gnd, OS+TC Brd w/#12 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 12AWG (65x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/12AWG Tinned Copper 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

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	12 AWG	65x30	TC - Tinned Copper
Ground Wire	1	12 AWG	65x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLPE - Cross Linked Polyethylene	0.046 in (1.2 mm)	0.187 in (4.75 mm)	ICEA Chart M4
Ground Wire	PVC - Polyvinyl Chloride	0.047 in (1.2 mm)	0.187 in (4.75 mm)	Green/Yellow Stripe

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Tri-Laminate (Alum+Poly+Alum)	100%	12 AWG (65x30) TC
Braid	Tinned Copper (TC)	85%	

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.073 in (1.9 mm)	0.630 in (16.0 mm)	Yes

Overall Cable Diameter (Nominal):	0.630 in (16.0 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)	1.566 Ohm/1000ft	26 pF/ft (85 pF/m)	47 pF/ft (150 pF/m)	71 Ohm	55%	30 Amps per Conductor at 30ºC
	1.72 Ohm/1000ft (5.64 Ohm/km)					24 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.
7.6 in (190 mm)	7.6 in (190 mm)

Max. Pull Tension:	502 lbs (228 kg)
Bulk Cable Weight:	277 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: 0.571 Revision Date: 12-22-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
29502 010100	Black	Reel	100 ft	612825136743	
29502 010250	Black	Reel	250 ft	612825136781	C Z
29502 010500	Black	Reel	500 ft	612825136804	C Z
29502 0101000	Black	Reel	1,000 ft	612825136750	C Z
29502 0105000	Black	Reel	5,000 ft	612825136811	C Z

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