

Product: 29543

VFD 100% Gnd, 3C #1 Str TC XLPO Ins + #1 Symm. Seg. Gnd (3 of #6) Str BC, CTS, Blk PVC Jkt, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable

Request Sample

Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 1AWG (7x19x22) Tinned Copper XLPO Insulation M4 Color Code + 1AWG Symmetrical Segmented Ground (3 of 6AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black PVC Outer Jacket, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable 1000V CSA AWM I/II A/B 2000V RW90 TC SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

Suitable Applications:	AC Motor drives, VFD, Variable Frequency drives

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
	1	7x19x22	TC - Tinned Copper	3
Ground Wire	6	7x19x27	BC - Bare Copper	3

Conductor Count:	3

Insulation

Material	Nominal Wall Thickness
XLPE - Cross Linked Polyethylene	0.092 in

Outer Shield Material

Type	Layer	Material	Coverage [%]
Tape	1	Spiral Copper	100 %
Tape	2	Spiral Copper	100 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	1.346 in	0.083 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
0.13 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
45 pF/ft	81 pF/ft

Inductance

Nominal Inductance
0.146 µH/ft

Impedance

Nominal Characteristic Impedance

53 Ohm

Current

Max. Recommended Current [A]
150 Amps per conductor @ 30°C

Voltage

UL Voltage Rating
2000 V RMS
1000 V RMS

Temperature Range

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

Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	1439 lbs/1000ft
Max Recommended Pulling Tension:	2650 lbs
Min Bend Radius/Minor Axis:	13.6 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, RHW-2, WTTC
CEC/C(UL) Specification:	TC
CSA AWM Specification:	AWM I/II A/B
PMSHA Specification:	P-07-KA070003
Other Specification:	2000V UL Flexible Motor Supply Cable

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-11-09
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Burial:	Yes
Suitability - Indoor:	Yes
Suitability - Oil Resistance:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	RW90, FT4
UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202, 383
UL voltage rating:	2000 V RMS (NEC Type TC)

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	UPC	Length
29543 0101000	Black	612825138532	1,000 ft
29543 0103000	Black	612825138549	3,000 ft

History

Update and Revision:	Revision Number: 0.313 Revision Date: 09-10-2019

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