



Product: [29545](#)

VFD 100% Gnd, 3C #2/0 Str TC XLPE Ins + #2/0 Symm. Seg. Gnd (3 of #4+) Str BC, CTS, Blk PVC Jkt, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable

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Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 2/0AWG (7x19x20) Tinned Copper XLPE Insulation M4 Color Code + 2/0AWG Symmetrical Segmented Ground (3 of 4AWG+) 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
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor	2/0	7x19x20	TC - Tinned Copper	3
Segmented Ground (3X Bare)	4	7x19x25	BC - Bare Copper	3

Conductor Count:	3
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Insulation

Material	Nominal Wall Thickness
XLP, XLPO, XLPE (Thermoset)	0.093 in
No Insulation	

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3

Outer Shield Material

Type	Description	Layer	Material	Coverage [%]
Helical Tape	.002"	1	BC - Bare Copper	100 %
Helical Tape	.002"	2	BC - Bare Copper	100 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	1.553 in	0.083 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
0.079 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield

50 pF/ft	90 pF/ft
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Inductance

Nominal Inductance
0.141 μ H/ft

Impedance

Nominal Characteristic Impedance
49 Ohm

Current

Max. Recommended Current [A]
195 Amps per conductor @ 30°C (per NEC)

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:	2148 lbs/1000ft
Max Recommended Pulling Tension:	4200 lbs
Min Bend Radius/Minor Axis:	15.5 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, RHW-2, WTTTC
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
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, LSOH, 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)
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Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Putup Type	Length	UPC
29545 0101000	Black	Reel	1,000 ft	612825138570
29545 0102000	Black	Reel	2,000 ft	612825138594

History

Update and Revision:	Revision Number: 0.332 Revision Date: 04-28-2020
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