



Product: 29539

VFD 300% Gnd, 3C+IG #8 Str TC, XLPO Ins+PVC Gnd, OS+TC Brd, Blk PVC Jkt, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable

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Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 8AWG (7x19x29) Tinned Copper, XLPO Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, Black PVC Outer Jacket, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable 1000V CSA AWM I/II A/B 600V CIC 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

AWG	Stranding	Material	No. of Conductors
8	7x19x29	TC - Tinned Copper	4

Conductor Count:	4
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Insulation

Material	Nominal Wall Thickness
XLPE - Cross Linked Polyethylene	0.072 in

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3
4	Green/Yellow

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Aluminum/Polyester	Duofoil®	100 %	TC - Tinned Copper	14	41x30 mm
Braid	2	TC - Tinned Copper		85 %			

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.949 in	0.095 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
0.64 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
36 pF/ft	65 pF/ft

Inductance

Nominal Inductance

0.181 µH/ft

Impedance**Nominal Characteristic Impedance**

65 Ohm

Current**Max. Recommended Current [A]**

55 Amps per conductor @ 30°C

Voltage**UL Voltage Rating**

2000 V RMS

600 V RMS (Type TC)

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:	604 lbs/1000ft
Max Recommended Pulling Tension:	768 lbs
Min Bend Radius/Minor Axis:	9.6 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, RHW-2, WTTC
CEC/C(UL) Specification:	CIC, 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):	2005-10-13
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, LSOH, Toxicity Testing

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	Footnote
29539 0101000	Black	612825138457	1,000 ft	Z
29539 0105000	Black	612825138464	5,000 ft	Z

Footnote: Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

History

Update and Revision: Revision Number: 0.320 Revision Date: 09-10-2019

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