



Product: [29538](#)

VFD 300% Gnd, 3C+G #10 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#10 TC Drain, 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 10AWG (105x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/10AWG Tinned Copper Drain, 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

Element	AWG	Stranding	Material	No. of Conductors
Conductor	10	105x30	TC - Tinned Copper	3
Ground	10	105x30	TC - Tinned Copper	1

Conductor Count:	3
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Insulation

Material	Nominal Wall Thickness
XLPE, XLPO, XLPE (Thermoset)	0.063 in
XLPE, XLPO, XLPE (Thermoset)	

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
Tape	1	Alum / Poly / Alum	Duofoil®	100 %	TC - Tinned Copper	10 (4x)
Braid	2	TC - Tinned Copper		85 %		

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.788 in	0.073 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
0.988 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
34 pF/ft	61 pF/ft

Inductance

Nominal Inductance
0.184 μ H/ft

Impedance

Nominal Characteristic Impedance
71 Ohm

Current

Max. Recommended Current [A]
40 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 Dry

Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	416 lbs/1000ft
Max Recommended Pulling Tension:	592 lbs
Min Bend Radius/Minor Axis:	7.9 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, WTTC
CEC/C(UL) Specification:	CIC, TC
CSA AWM Specification:	AWM I/II A/B
PMSHA Specification:	P-07-KA070003
Other Specification:	1000V 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
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

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
29538 0101000	Black	Reel	1,000 ft	612825138433
29538 0105000	Black	Reel	5,000 ft	612825138440

History

Update and Revision:	Revision Number: 0.345 Revision Date: 04-28-2020
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