



Product: [29507](#)

VFD 300% Gnd, 3C+G #2 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/4-#8 TC Drains, Blk PVC Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable

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Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 2AWG (7x19x23) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/4-8AWG Tinned Copper Drains, Black PVC Outer Jacket, 600V TC-ER 90C Dry/Wet 1000V 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	2	7x19x23	TC - Tinned Copper	3
Ground	2	7x19x23	TC - Tinned Copper	1

Conductor Count:	3
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Insulation

Material	Nominal Wall Thickness
XLPE, XLPO, XLPE (Thermoset)	0.062 in
PVC - Polyvinyl Chloride	0.062 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
Tape	1	Alum / Poly / Alum	Duofoil®	100 %	TC - Tinned Copper	8 (4x)
Braid	2	TC - Tinned Copper		85 %		

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	1.324 in	0.095 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
0.16 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
40 pF/ft	72 pF/ft

Inductance

Nominal Inductance
0.153 µH/ft

Impedance

Nominal Characteristic Impedance
46 Ohm

Current

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

Voltage

Description	UL Voltage Rating
CSA AWM I/II A/B	1000 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
Wet Temp Range:	-40°C To +90 °C
Dry Temp Range:	-40°C To +90 °C

Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	1630 lbs/1000ft
Max Recommended Pulling Tension:	3088 lbs
Min Bend Radius/Minor Axis:	10.75 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:	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, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading
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CSA Flammability:	FT4
IEEE Flammability:	1202, 383
UL voltage rating:	1000 V RMS (Flexible Motor Supply Cable)

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Putup Type	Length	UPC
29507 010250	Black	Reel	250 ft	612825137368
29507 010500	Black	Reel	500 ft	612825137375
29507 0101000	Black	Reel	1,000 ft	612825137320
29507 0102000	Black	Reel	2,000 ft	612825137351

Footnote:	C - CRATE REEL PUT-UP.
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: 0.358 Revision Date: 04-28-2020
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