



Product: [29535](#)

VFD, 3C 500MCM Str BC XLPO Ins + #2 Symm. Seg. Gnd (3 of #6) Str BC, CTS, Blk PVC Jkt, 2000V TC-ER 1000V CSA 22.2 No. 230 TC SUN RES OIL RES DIR BUR

[Request Sample](#)

Product Description

Belden Basics VFD, 3 Conductor 500MCM (37x.1162) Bare Copper XLPO Insulation M4 Color Code + 2AWG Symmetrical Segmented Ground (3 of 6AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black PVC Outer Jacket, 2000V TC-ER 1000V CSA 22.2 No. 230 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
500 MCM	37x.1162	BC - Bare Copper	3

Conductor Count:	3
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Insulation

Material	Nominal Wall Thickness
XLPE - Cross Linked Polyethylene	0.105 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	2.41 in	0.110 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
0.022 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
54 pF/ft	97 pF/ft

Inductance

Nominal Inductance
0.136 µH/ft

Impedance

Nominal Characteristic Impedance
44 Ohm

Current

Max. Recommended Current [A]

430 Amps per conductor @ 30°C (per NEC)

Voltage

UL Voltage Rating

2000 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:	6749 lbs/1000ft
Max Recommended Pulling Tension:	12000 lbs
Min Bend Radius/Minor Axis:	43.4 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, RHW-2, RW90
UL AWM Style:	1277
CSA AWM Specification:	C22.2 #230 Type TC

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):	2012-06-11
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
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Part Number

Variants

Item #	Color	UPC	Length
29535 0101300	Black	612825138389	1,300 ft

History

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