



Part Number: 29503

1000V UL Flex Motor VFD, (3) 10 AWG (105x30) TC+Grd, XLP/PVC, Foil+TC Braid Shld, TC-ER

Product Description

Three 10 AWG stranded (105x30) tinned copper circuit conductors plus ground wire, cross-linked polyolefin insulation, overall Duofoil® (100% coverage) plus a tinned copper braid shield (85% coverage), PVC jacket.

Product Specifications

Technical Specifications

Suitable Applications:	AC Motor drives, VFD, Variable Frequency drives
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Construction and Dimensions

Conductor:

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

Total Number of Conductors:	3
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Insulation:

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.045 in
XLP - Cross Linked Polyolefin	

Stranding:

Lay Length
Y mm

Outershield 1:

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Aluminum Foil-Polyester Tape	Duofoil®	100 %	TC - Tinned Copper	10	105x30 mm
Braid	2	TC - Tinned Copper		85 %			

Outerjacket 1:

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.69 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
29 pF/ft	53 pF/ft

Min Insulation Resistance:	300 Megaohms/1000 ft. MOhm*1000ft
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Impedance:

Nominal Characteristic Impedance
63 Ohm

Current:

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

Inductance:

Nominal Inductance
0.184 µH/ft

Voltage:

UL Voltage Rating
1000 V RMS (Flexible Motor Supply Cable)
600 V RMS (NEC Type TC)

Use

Suitability - Oil Resistance:	Yes
Suitability - Burial:	Yes
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes
Max Recommended Pulling Tension:	592 lbs

Safety

CSA Flammability:	FT4
IEEE Flammability:	1202
UL Flammability:	UL1685 UL Loading

Temperature Range

Dry Temp Range:	-40°C To +90 °C
UL Temp Rating:	90°C Wet/Dry
Wet Temp Range:	-40°C To +90 °C

Mechanical Characteristics

Min Bend Radius/Minor Axis:	5.5 in
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Part Number

Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
CEC/C(UL) Specification:	CEC/C(UL) Specification
CSA AWM Specification:	CSA Specification
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)
NEC Articles:	NEC Articles
NEC/(UL) Specification:	NEC/(UL) Specification
Other Specification:	Other Specification
PMSHA Specification:	PMSHA Specification
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	EU CE Mark

History

Product Variants

Part Number	Color	Put-Up Type	Length
29503 0101000	BLACK	Reel	1000 ft
29503 010100	BLACK	Reel	100 ft
29503 010250	BLACK	Reel	250 ft
29503 0105000	BLACK	Reel	5000 ft
29503 010500	BLACK	Reel	500 ft

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