



Part Number: 29502

1000V UL Flex Motor VFD, (3) 12 AWG (65x30) TC+Grd, XLP/PVC, Foil+TC Braid Shld, TC-ER

Product Description

Three 12 AWG stranded (65x30) 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
	12	65x30	TC - Tinned Copper	3
Ground Wire	12	65x30	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	

Color Chart 1:

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

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	12	65x30 mm
Braid	2	TC - Tinned Copper		85 %			

Outerjacket 1:

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.63 in	0.073 in

Electrical Characteristics

Conductor DCR:

Nominal Conductor DCR
1.6 Ohm/1000ft

Capacitance:

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
26 pF/ft	47 pF/ft

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

Nominal Characteristic Impedance
71 Ohm

Current:

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

Inductance:

Nominal Inductance

0.197 μ H/ft

Voltage:

Description	UL Voltage Rating	Voltage Rating [V]
CSA AWM I/II A/B	1000 V RMS (Flexible Motor Supply Cable)	1000 V RMS
	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:	336 lbs

Safety

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

Temperature Range

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

Mechanical Characteristics

Min Bend Radius/Minor Axis:	6.3 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
29502 0101000	BLACK	Reel	1000 ft
29502 010100	BLACK	Reel	100 ft
29502 010250	BLACK	Reel	250 ft
29502 0105000	BLACK	Reel	5000 ft
29502 010500	BLACK	Reel	500 ft

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