



Part Number: 29505

1000V UL Flex Motor VFD, (3) 6 AWG (7x19x27) TC+Grd, XLP/PVC, Foil+TC Braid Shld, TC-ER

Product Description

Three 6 AWG stranded (7x19x27) 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
	6	7x19x27	TC - Tinned Copper	3
Ground Wire	6	7x19x27	TC - Tinned Copper	

Total Number of Conductors:	3
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Insulation:

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.06 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 (4x)	65x30 mm
Braid	2	TC - Tinned Copper		85 %			

Outerjacket 1:

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	1.028 in	0.093 in

Electrical Characteristics

Conductor DCR:

Nominal Conductor DCR
0.41 Ohm/1000ft

Capacitance:

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
33 pF/ft	60 pF/ft
Min Insulation Resistance:	300 Megaohms/1000 ft. MOhm*1000ft

Impedance:

Nominal Characteristic Impedance
56 Ohm

Current:

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

Inductance:

Nominal Inductance

0.171 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:	1220 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:	8.25 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
29505 0101000	BLACK	Reel	1000 ft
29505 010250	BLACK	Reel	250 ft
29505 0103500	BLACK	Reel	3500 ft

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