



Part Number: 29531

1000V UL Flex Motor VFD, (3) 3/0 AWG (19x7x19) TC+Grd, XLPE/PVC, Foil Shld, TC-ER

Product Description

Three 3/0 AWG stranded (19x7x19) tinned copper circuit conductors plus three symmetrical ground wires, cross-linked polyethylene insulation, two spiral copper tape shields (100% Coverage), PVC jacket.

Product Specifications

Technical Specifications

 Suitable Applications:
 AC Motor drives, VFD, Variable Frequency drives

Construction and Dimensions

Conductor:

Element	AWG	Stranding	Material	No. of Conductors
	36586	19x7x19	TC - Tinned Copper	3
Ground Wire	4	7x19x25	BC - Bare Copper	
Total Number of Conductors: 3				

Insulation:

Material	Nominal Wall Thickness
XLP - Cross Linked Polyolefin	0.057 in

Color Chart 1:

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3

Stranding:

Lay Length	
Y mm	

Outershield 1:

Туре	Description	Layer	Material	Coverage [%]
Таре	.002"	1	Spiral Copper	100 %
Таре	.002"	2	Spiral Copper	100 %

Outerjacket 1:

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	1.52 in	0.083 in

Electrical Characteristics

Conductor DCR:

Nominal Conductor DCR	
0.063 Ohm/1000ft	

Capacitance:

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
48 pF/ft	86 pF/ft

Current:

Max. Recommend	led Current [A]		
225 Amps per cond	luctor @ 30°C (per NEC)		

Inductance:

Nominal Inductance	
0.138 µH∕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:	5025 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:	15.2 in
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Part Number

Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)	
CSA AWM Specification:	CSA Specification	
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)	
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
29531 0101000	BLACK	Reel	1000 ft
29531 0102000	BLACK	Reel	2000 ft
29531 010250	BLACK	Reel	250 ft
29531 010500	BLACK	Reel	500 ft

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