Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



29502 Multi-Conductor - 1000V UL Flexible Motor Supply Cable



For more Information please call

1-800-Belden1



Description:

4-cond. (3) stranded tinned copper circuit conductors plus (1)ground wire with PVC insulation, XLPE insulation, Overall Duofoil® (100% coverage) plus a tinned copper braid shield (85% coverage), tinned copper drain wire, Sun- & oil-resistant PVC jacket.

Usage (Overall)

Suitable Applications: AC Motor Drives, VFD, Variable Frequency Drive

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material		
3	12	65x30	TC - Tinned Copper		

Ground Wire

Ground Wire (Y/N):	Υ
Ground Wire AWG:	12
Ground Wire Stranding:	65x30
Ground Wire Conductor Material:	TC - Tinned Copper
Ground Wire Insulation Material:	PVC - Polyvinyl Chloride

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)		
XLPE - Cross Linked Polyethylene	1.143		

Insulation Resistance: 300 Megaohms/1000 ft.

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Туре	Outer Shield Material	Coverage (%)
1	Duofoil®	Таре	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	85

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material			
12	65x30	TC - Tinned Copper			

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter: 16.002 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +90°C Dry, +90°C Wet

UL Temperature Rating: 90°C Wet/Dry

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Bulk Cable Weight:	372.050 Kg/Km	
Max. Recommended Pulling Tension:	1494.600 N	
Min. Bend Radius (Install)/Minor Axis:	132.080 mm	

Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs NEC/(UL) Specification: TC-ER, Unlisted Singles, WTTC **NEC Articles:** 336 - ER **CSA Specification:** 1000 V AWM I/II A/B EU CE Mark: Yes EU Directive 2000/53/EC (ELV): Yes EU Directive 2002/95/EC (RoHS): Yes EU RoHS Compliance Date (mm/dd/yyyy): 10/13/2005 EU Directive 2002/96/EC (WEEE): Yes EU Directive 2003/11/EC (BFR): Yes CA Prop 65 (CJ for Wire & Cable): Yes MII Order #39 (China RoHS): Yes **PMSHA Specification:** P-07-KA070003 Other Specification: 1000V UL Flexible Motor Supply Cable **Flame Test UL Flame Test:** UL1685 UL Loading **CSA Flame Test:** FT4 **IEEE Flame Test:** 1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU) Suitability Suitability - Indoor: Yes Suitability - Outdoor: Yes Yes Suitability - Burial: Sunlight Resistance: Yes

Yes

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 71

Oil Resistance:

Nom. Inductance:

Inductance (µH/m) 0.646357

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 85.306

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 154.207

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 5.2496

Max. Operating Voltage - UL:

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Voltage

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

Max. Recommended Current:

Current

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

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29502 010100	30 MT	14.651 KG	BLACK		#12/4C XLPE SH PVC
29502 0101000	305 MT	136.532 KG	BLACK	CZ	#12/4C XLPE SHPVC
29502 010250	76 MT	34.700 KG	BLACK	CZ	#12/4C XLPE SHPVC
29502 010500	152 MT	66.225 KG	BLACK	CZ	#12/4C XLPE SHPVC
29502 0105000	1,524 MT	707.607 KG	BLACK	CZ	#12/4C XLPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

Revision Number: 2 Revision Date: 11-10-2010

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