



Product: [29530C](#)

VFD, 3C #2/0 Str BC XLPE Ins + #5 Symm. Seg. Gnd (3 of #10) Str BC, CTS, Blk PVC Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B

Request Sample

Product Description

Belden Basics VFD, 3 Conductor 2/0AWG (19x12) Bare Copper XLPE Insulation M4 Color Code + 5AWG Symmetrical Segmented Ground (3 of 10AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black PVC Outer Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | Variable Frequency Drives (VFD); AC Motor and Drive Systems |
|------------------------|---|

Construction Details

| Element | No. of Elements | Size | Stranding | Material | Notes |
|--------------|-----------------|---------|-----------|------------------|-------------------------------------|
| Conductor(s) | 3 | 2/0 AWG | 19x12 | BC - Bare Copper | ASTM B3 Copper B8 Class B Stranding |
| Ground Wire | 3 | 10 AWG | 7x18 | BC - Bare Copper | Segmented Ground |

| Element | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code |
|--------------|-----------------------------|-------------------|--------------------------|---------------|
| Conductor(s) | XLPO - Crosslink Polyolefin | 0.057 in (1.4 mm) | 0.516 in (13.1 mm) | ICEA Chart M4 |
| Ground Wire | No Insulation | | | |

| Shield Type | Material | Coverage |
|--------------|------------------|----------|
| Helical Tape | Bare Copper (BC) | 100% |
| Helical Tape | Bare Copper (BC) | 100% |

| Material | Nom. Thickness | Nom. Diameter | Ripcord |
|--------------------------|-------------------|---------------------|---------|
| PVC - Polyvinyl Chloride | 0.083 in (2.1 mm) | 1.305 in (33.15 mm) | Yes |

| | |
|-----------------------------------|---------------------|
| Overall Cable Diameter (Nominal): | 1.305 in (33.15 mm) |
|-----------------------------------|---------------------|

Electrical Characteristics

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedence | Nom. Velocity of Prop. | Max. Current |
|--------------|-------------------------------|-------------------------------|---|-------------------------------|------------------------|--|
| Conductor(s) | 0.082 Ohm/1000ft | 37 pF/ft (120 pF/m) | 67 pF/ft (220 pF/m) | 50 Ohm | 55% | 195 Amps per Conductor at 30°C (per NEC) |
| | 1.08 Ohm/1000ft (3.54 Ohm/km) | | | | | |

| Voltage |
|-------------------|
| UL Voltage Rating |
| 1000 V (TC-ER) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|--------------------|----------------|
| 90°C Dry, 90°C Wet | -40°C To +90°C |

Bend Radius

| Stationary Min. | Installation Min. |
|------------------|-------------------|
| 15.7 in (399 mm) | 15.7 in (399 mm) |

| | |
|--------------------|--------------------|
| Max. Pull Tension: | 5301 lbs (2404 kg) |
| Bulk Cable Weight: | 1724 lbs/1000ft |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor, Outdoor, Sunlight Resistance, Burial |
| Sustainability: | CA Prop 65 |
| Flammability / Reaction to Fire: | UL 1685 UL Loading, IEEE 1202 FT4, FT4 |
| NEC / UL Compliance: | Article 336, TC-ER, XHHW-2 |
| ICEA Compliance: | S-95-658 |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |
| Other Standard Compliance(s): | P-07-KA070003-MSHA |

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.584 Revision Date: 04-26-2024 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC |
|----------------|-------|------------|----------|--------------|
| 29530C 0102000 | Black | Reel | 2,000 ft | 612825138105 |

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