



Product: [29729C](#)

VFD, 3C #1/0 Str BC XLPE Ins + #5 Symm. Seg. Gnd (3 of #10) Str BC, CTS, Blk PVC Jkt, 2000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B

Product Description

Belden Basics VFD, 3 Conductor 1/0AWG (19x13) 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, 2000V 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; High voltage requirements |
|------------------------|--|

Construction Details

| Conductor | | | | | |
|--------------|-----------------|---------|-----------|------------------|-------------------------------------|
| Element | No. of Elements | Size | Stranding | Material | Notes |
| Conductor(s) | 3 | 1/0 AWG | 19x13 | BC - Bare Copper | ASTM B3 Copper B8 Class B Stranding |
| Ground | 3 | 10 AWG | 7x18 | BC - Bare Copper | Segmented Grounds |

| Insulation | | | | |
|--------------|--|-------------------|--------------------------|--------------------|
| Element | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code |
| Conductor(s) | XLPE - Cross-Linked Polyethylene (Thermoset) | 0.093 in (2.4 mm) | 0.548 in (13.9 mm) | Black and Numbered |
| Ground | No Insulation | | | |

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

| Outer Jacket | | | |
|-----------------------------------|-------------------|---------------------|---------|
| Material | Nom. Thickness | Nom. Diameter | Ripcord |
| PVC - Polyvinyl Chloride | 0.083 in (2.1 mm) | 1.359 in (34.52 mm) | Yes |
| Overall Cable Diameter (Nominal): | | 1.359 in (34.52 mm) | |

Electrical Characteristics

| Electricals | | | | | | |
|--------------|---------------------------------|-------------------------------|---|-------------------------------|------------------------|--------------------------------|
| 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) | 0.103 Ohm/1000ft (0.338 Ohm/km) | 29 pF/ft (95 pF/m) | 53 pF/ft (170 pF/m) | 63 Ohm | 55% | 170 Amps per Conductor at 30°C |

| Voltage | |
|--|--|
| UL Voltage Rating | |
| 2000 V (TC), 1000 V (CSA AWM I/II A/B) | |

Mechanical Characteristics

| Temperature | |
|----------------|-----------|
| UL Temperature | Operating |

| | |
|--------------------|----------------|
| 90°C Dry, 90°C Wet | -40°C To +90°C |
|--------------------|----------------|

Bend Radius

| Stationary Min. | Installation Min. |
|------------------|-------------------|
| 16.3 in (414 mm) | 16.3 in (414 mm) |

| | |
|--------------------|------------------------------|
| Max. Pull Tension: | 3958 lbs (1795 kg) |
| Bulk Cable Weight: | 1528 lbs/1000ft (2274 kg/km) |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial |
| Sustainability: | CA Prop 65 |
| Flammability / Reaction to Fire: | UL1685 UL Loading, 1202, 383 Vertical Tray Flame Test (70,000 BTU) |
| NEC / UL Compliance: | Article 336, TC-ER, RHW-2 |
| AWM Compliance: | I/II A/B |
| 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: 0.74 Revision Date: 04-26-2024 |
|----------------------|---|

Part Numbers

Variants

| Item # | Putup Type | UPC |
|----------------|------------|--------------|
| 29729C 0101000 | Reel | 612825445630 |
| 29729C 0101500 | Reel | 612825445647 |
| 29729C 0103000 | Reel | 612825445654 |

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