



Product: [29727C](#)

VFD, 3C #2 Str BC XLPE Ins + #5 Symm. Seg. Gnd (3 of #10) Str BC, CTS, Bk PVC Jkt, 2000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B

Product Description

Belden Basics VFD, 3 Conductor 2AWG (7x10) 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 | Number of Element | Size | Stranding | Material | Notes |
|--------------|-------------------|--------|-----------|------------------|-------------------|
| Conductor(s) | 3 | 2 AWG | 7x10 | BC - Bare Copper | |
| 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) | 0.073 in (1.9 mm) | 0.428 in (10.9 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) | 1.100 in (27.94 mm) | Yes |

Cable Diameter (Nominal): 1.100 in (27.94 mm)

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedance | Nom. Velocity of Prop. | Max. Current |
|--------------|-------------------------------|-------------------------------|---|-------------------------------|------------------------|--------------------------------|
| Conductor(s) | 0.14 Ohm/1000ft (0.46 Ohm/km) | 21 pF/ft (69 pF/m) | 38 pF/ft (120 pF/m) | 90 Ohm | 55% | 130 Amps per Conductor at 25°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. |
|------------------|-------------------|
| 13.2 in (335 mm) | 13.2 in (335 mm) |

| | |
|--------------------|------------------------------|
| Max. Pull Tension: | 3027 lbs (1373 kg) |
| Bulk Cable Weight: | 1032 lbs/1000ft (1536 kg/km) |

Standards and Compliance

| | |
|---------------------------------|---|
| Environmental Suitability: | Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial |
| Sustainability: | CA Prop 65 |
| Flammability / Fire Resistance: | UL1685 UL Loading, FT4, 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: 0.57 Revision Date: 10-11-2021 |
|----------------------|---|

Variants

| Item # | Putup Type | UPC |
|----------------|------------|--------------|
| 29727C 0101000 | Reel | 612825445708 |
| 29727C 0102500 | Reel | 612825445715 |
| 29727C 0105000 | Reel | 612825445722 |

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