



Product: <u>29724C</u> ☑

VFD, 3C #8 Str BC XLPE Ins + #10 Symm. Seg. Gnd (3 of #14) 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 8AWG (7x16) Bare Copper XLPE Insulation M4 Color Code + 10AWG Symmetrical Segmented Ground (3 of 14AWG) 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 | 8 AWG | 7x16 | BC - Bare Copper | ASTM B3 Copper B8 Class B Stranding |
| Ground | 3 | 14 AWG | 7x22 | BC - Bare Copper | Segmented Grounds |

Insulation

| Eleme | nt | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code |
|----------|-------|--|-------------------|--------------------------|--------------------|
| Conducto | or(s) | XLPE - Cross-Linked Polyethylene (Thermoset) | 0.072 in (1.8 mm) | 0.286 in (7.26 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 |
|-----------------------------------|--------------------------|--------------------|--------------------|---------|
| P | PVC - Polyvinyl Chloride | 0.083 in (2.1 mm) | 0.794 in (20.2 mm) | Yes |
| Overall Cable Diameter (Nominal): | | 0.794 in (20.2 mm) | | |

Electrical Characteristics

Electricals

| E | lement | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedence | Nom. Velocity of Prop. | Max. Current |
|-----|------------|-----------------------------------|----------------------------------|--|----------------------------------|---------------------------|-------------------------------|
| Cor | nductor(s) | 0.564 Ohm/1000ft (1.85 Ohm/km) | 21 pF/ft (69 pF/m) | 38 pF/ft (120 pF/m) | 90 Ohm | 55% | 55 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

Bend Radius

| Stationary Min. | Installation Min. | |
|--------------------|-------------------|--|
| 9.5 in (240 mm) | 9.5 in (240 mm) | |
| | | |
| Max. Pull Tension | 1: | |
| Bulk Cable Weight: | | |

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

| U | Jpdate and Revision: | Revision Number: 0.75 Revision Date: 05-31-2024 |
|---|----------------------|---|
|---|----------------------|---|

Part Numbers

Variants

| ltem # | Putup Type | UPC |
|----------------|------------|--------------|
| 29724C 0102500 | Reel | 612825445494 |
| 29724C 0105000 | Reel | 612825445500 |

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