



Product: [29521C](#)

VFD, 3C #14 Str BC XLPE Ins + #14 Symm. Seg. Gnd (3 of #18) Str BC, CTS, Blk PVC Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B

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Product Description

Belden Basics VFD, 3 Conductor 14AWG (7x22) Bare Copper XLPE Insulation M4 Color Code + 14AWG Symmetrical Segmented Ground (3 of 18AWG) 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

Conductor

| Element      | Number of Element | AWG | Stranding | Material         | Notes             |
|--------------|-------------------|-----|-----------|------------------|-------------------|
| Conductor(s) | 3                 | 14  | 7x22      | BC - Bare Copper |                   |
| Ground       | 3                 | 18  | 7x26      | BC - Bare Copper | Segmented Grounds |

Insulation

| Element      | Material                                     | Thickness          | Color Code         |
|--------------|----------------------------------------------|--------------------|--------------------|
| Conductor(s) | XLPE - Cross-Linked Polyethylene (Thermoset) | 0.030 in (0.76 mm) | Black and Numbered |
| Ground       | No Insulation                                |                    |                    |

Outer Shield

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

Outer Jacket

| Material                 | Thickness         | Nom. Diameter      | Ripcord |
|--------------------------|-------------------|--------------------|---------|
| PVC - Polyvinyl Chloride | 0.060 in (1.5 mm) | 0.425 in (10.8 mm) | Yes     |

|                           |                    |
|---------------------------|--------------------|
| Cable Diameter (Nominal): | 0.425 in (10.8 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) | 2.282 Ohm/1000ft (7.487 Ohm/km) | 23 pF/ft (75 pF/m)            | 42 pF/ft (140 pF/m)                             | 80 Ohm                        | 55%                    | 25 Amps per Conductor at 25°C |

Voltage

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

Mechanical Characteristics

Temperature

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

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 5.1 in (130 mm) | 5.1 in (130 mm)   |

|                    |                            |
|--------------------|----------------------------|
| Max. Pull Tension: | 231 lbs (105 kg)           |
| Bulk Cable Weight: | 134 lbs/1000ft (199 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, XHHW-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)                                                                                           |

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.440 Revision Date: 07-06-2021 |
|----------------------|--------------------------------------------------|

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