



Product: [29547](#)

VFD 100% Gnd, 3C #4/0 Str TC XLPE Ins + #4/0 Symm. Seg. Gnd (3 of #2) Str BC, CTS, Blk PVC Jkt, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable WTTC

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Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 4/0AWG (7x19x18) Tinned Copper XLPE Insulation M4 Color Code + 4/0AWG Symmetrical Segmented Ground (3 of 2AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black PVC Outer Jacket, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable WTTC 1000V CSA AWM I/II A/B 2000V RW90 TC 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 | AWG | Stranding | Material | Notes |
|--------------|-------------------|-----|-----------|--------------------|-------------------|
| Conductor(s) | 3 | 4/0 | 7x19x18 | TC - Tinned Copper | |
| Ground | 3 | 2 | 7x19x23 | BC - Bare Copper | Segmented Grounds |

Insulation

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

Outer Shield Material

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

Outer Jacket Material

| Material | Thickness | Nom. Diameter | Ripcord |
|--------------------------|--------------------|---------------|---------|
| PVC - Polyvinyl Chloride | 0.116 in (2.95 mm) | 1.873 in | Yes |

| | |
|---------------------------|---------------------|
| Cable Diameter (Nominal): | 1.873 in (47.57 mm) |
|---------------------------|---------------------|

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Characteristic Impedance | Nom. Velocity of Prop. | Max. Current |
|--------------|--------------------------------|-------------------------------|---|--------------------------|------------------------|--------------------------------|
| Conductor(s) | 0.047 Ohm/1000ft (0.15 Ohm/km) | 33 pF/ft (110 pF/m) | 60 pF/ft (200 pF/m) | 56 Ohm | 55% | 260 Amps per Conductor at 30°C |

Voltage

| UL Voltage Rating |
|--|
| 2000 V (TC, C(UL) TC), 1000 V (WTTC, UL Flexible Motor Supply Cable, 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. |
|------------------|-------------------|
| 22.5 in (572 mm) | 22.5 in (572 mm) |

| | |
|--------------------|------------------------------|
| Max. Pull Tension: | 10323 lbs (4682.4 kg) |
| Bulk Cable Weight: | 3429 lbs/1000ft (5103 kg/km) |

Standards and Compliance

| | |
|---------------------------------|---|
| Environmental Suitability: | Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial |
| Sustainability: | CA Prop 65 |
| Flammability / Fire Resistance: | UL1685 UL Loading, RW90, FT4, FT4, 1202, 383 Vertical Tray Flame Test (70,000 BTU) |
| NEC / UL Compliance: | Article 336, TC-ER, WTTTC, RHW-2, UL Flexible Motor Supply Cable |
| AWM Compliance: | I/II A/B |
| CEC / C(UL) Compliance: | TC |
| 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

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| Update and Revision: | Revision Number: 0.274 Revision Date: 06-08-2021 |
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