



Product: <u>29501F</u> ☑

VFD 300% Gnd, 3C+G #14 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#14 TC Drain, Blk TPE Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

Request Sample

Product Description

Belden 300% Ground Extra Flexible VFD, 3 Conductor 14AWG (104x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/14AWG Tinned Copper Drain, Black TPE Outer Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V WTTC 600V CIC TC SUN RES OIL RES II DIR BUR

Technical Specifications

Product Overview

| Suitable Applications: | Variable Frequency Drives (VFD); AC Motor and Drive Systems, Exposure to high flex, motion, and abrasion, Hard to reach installation areas |
|------------------------|--|

Construction Details

Conductor

| Element | No. of Elements | Size | Stranding | Material |
|--------------|-----------------|--------|-----------|--------------------|
| Conductor(s) | 3 | 14 AWG | 104x34 | TC - Tinned Copper |
| Ground Wire | 1 | 14 AWG | 104x34 | TC - Tinned Copper |

Insulation

| Element | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code |
|--------------|-----------------------------|-------------------|--------------------------|---------------------|
| Conductor(s) | XLPO - Crosslink Polyolefin | 0.046 in (1.2 mm) | 0.167 in (4.24 mm) | ICEA Chart M4 |
| Ground Wire | PVC - Polyvinyl Chloride | 0.046 in (1.2 mm) | 0.167 in (4.24 mm) | Green/Yellow Stripe |

Outer Shield

| Shield Type | Material | Coverage | Drainwire Type |
|-------------|-------------------------------|----------|--------------------|
| Таре | Tri-Laminate (Alum+Poly+Alum) | 100% | 14 AWG (104x34) TC |
| Braid | Tinned Copper (TC) | 86% | |

Outer Jacket

| Overall Cable D | Diameter (Nominal): | 587 in (14.9 mm) | |
|-----------------|-----------------------------|--|---------|
| Polyester Tape | TPE - Thermoplastic Elastor | er 0.073 in (1.9 mm) 0.587 in (14.9 mm | ı) Yes |
| Separator | Material | Nom. Thickness Nom. Diameter | Ripcord |

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) | 2.468 Ohm/1000ft | 40 pF/ft (130 pF/m) | 72 pF/ft (240 pF/m) | 46 Ohm | 55% | 25 Amps per Conductor at 30°C (per NEC) |
| | 2.73 Ohm/1000ft (8.96 Ohm/km) | | | | | 25 Amps per Conductor at 30°C (per NEC) |

Voltage

| UL Voltage Rating |
|--|
| 1000 V (TC-ER, XHHW-2, UL Flexible Motor Supply Cable), 600 V (C(UL) CIC TC) |

Mechanical Characteristics

Temperature

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

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 7.0 in (180 mm) | 7.0 in (180 mm) |

| Max. Pull Tension: | 340 lbs (150 kg) |
|--------------------|------------------|
| Bulk Cable Weight: | 216 lbs/1000ft |

Standards and Compliance

| Environmental Suitability: | Indoor, Outdoor, Sunlight Resistance |
|----------------------------------|---|
| Sustainability: | CA Prop 65 |
| Flammability / Reaction to Fire: | UL 1685 UL Loading, FT4, IEEE 1202 FT4 |
| NEC / UL Compliance: | Article 336, Article 310, TC-ER, XHHW-2, UL Flexible Motor Supply Cable |
| CEC / C(UL) Compliance: | CIC, 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

| Update and Revision: | Revision Number: 0.189 Revision Date: 04-14-2023 |
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Part Numbers

Variants

| | Item # | Color | Putup Type | Length | UPC |
|---|----------------|-------|------------|----------|--------------|
| | 29501F 0101000 | Black | Reel | 1,000 ft | 612825367222 |
| ı | 29501F 0105000 | Black | Reel | 5,000 ft | 612825367253 |

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