



Product: 29505

VFD 300% Gnd, 3C+IG #6 Str TC, XLPO Ins+PVC Gnd, OS+TC Brd, Blk PVC Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable

[Request Sample](#)

Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 6AWG (7x19x27) Tinned Copper, XLPO Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, Black PVC Outer Jacket, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V CSA AWM I/II A/B 600V CIC TC SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | AC Motor drives, VFD, Variable Frequency drives |
|------------------------|---|

Physical Characteristics (Overall)

Conductor

| Element | AWG | Stranding | Material | No. of Conductors |
|-------------|-----|-----------|--------------------|-------------------|
| | 6 | 7x19x27 | TC - Tinned Copper | 3 |
| Ground Wire | 6 | 7x19x27 | TC - Tinned Copper | 1 |

| | |
|------------------|---|
| Conductor Count: | 4 |
|------------------|---|

Insulation

| Material | Nominal Wall Thickness |
|----------------------------------|------------------------|
| XLPE - Cross Linked Polyethylene | 0.062 in |
| PVC - Polyvinyl Chloride | 0.062 in |

Color Chart

| Number | Color |
|--------|----------------------|
| 1 | Black and Numbered 1 |
| 2 | Black and Numbered 2 |
| 3 | Black and Numbered 3 |
| 4 | Green/Yellow |

Outer Shield Material

| Type | Layer | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|-------|-------|--------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | 1 | Aluminum/Polyester | Duofoil® | 100 % | TC - Tinned Copper | 12 (4x) | 65x30 mm |
| Braid | 2 | TC - Tinned Copper | | 85 % | | | |

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 1.002 in | 0.095 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR |
|-----------------------|
| 0.41 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| | |

| | |
|----------|----------|
| 33 pF/ft | 60 pF/ft |
|----------|----------|

Inductance

| |
|---------------------------|
| Nominal Inductance |
| 0.171 μ H/ft |

Impedance

| |
|---|
| Nominal Characteristic Impedance |
| 56 Ohm |

Current

| |
|-------------------------------------|
| Max. Recommended Current [A] |
| 75 Amps per conductor @ 30°C |

Voltage

| Description | UL Voltage Rating |
|------------------|---------------------|
| CSA AWM I/II A/B | 1000 V RMS |
| | 600 V RMS (Type TC) |

Temperature Range

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

Mechanical Characteristics

| | |
|----------------------------------|----------------|
| Oil Resistance: | Yes |
| Bulk Cable Weight: | 811 lbs/1000ft |
| Max Recommended Pulling Tension: | 1220 lbs |
| Min Bend Radius/Minor Axis: | 8.25 in |

Standards

| | |
|--------------------------|--------------------------------------|
| NEC Articles: | 336 - ER |
| NEC/(UL) Specification: | TC-ER, RHW-2, WTTTC |
| CEC/C(UL) Specification: | CIC, TC |
| CSA AWM Specification: | AWM I/II A/B |
| PMSHA Specification: | P-07-KA070003 |
| Other Specification: | 1000V UL Flexible Motor Supply Cable |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-10-13 |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------------------|-----|
| Suitability - Burial: | Yes |
| Suitability - Indoor: | Yes |
| Suitability - Oil Resistance: | Yes |
| Suitability - Outdoor: | Yes |
| Suitability - Sunlight Resistance: | Yes |

Flammability, LSOH, Toxicity Testing

| | |
|------------------|-------------------|
| UL Flammability: | UL1685 UL Loading |
|------------------|-------------------|

| | |
|--------------------|--|
| CSA Flammability: | FT4 |
| IEEE Flammability: | 1202, 383 |
| UL voltage rating: | 1000 V RMS (Flexible Motor Supply Cable) |

Part Number

Variants

| Item # | Color | UPC | Length | Footnote |
|---------------|-------|--------------|----------|----------|
| 29505 0101000 | Black | 612825137139 | 1,000 ft | C Z |
| 29505 010250 | Black | 612825137177 | 250 ft | C Z |
| 29505 0103500 | Black | 612825137184 | 3,500 ft | C Z |

| | |
|-----------|--|
| Footnote: | C - CRATE REEL PUT-UP. |
| Footnote: | Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN. |

History

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| Update and Revision: | Revision Number: 0.325 Revision Date: 09-10-2019 |
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