

29507F Multi-Conductor - 1000V UL Flexible Motor Supply Cable



For more Information
please call

1-800-Belden1



General Description:

3-cond. (3) stranded tinned copper circuit conductors plus (3) symmetrical tinned copper ground wires, XLP insulation, overall Duofoil® (100% cov.) plus a tinned copper braid shield (85% cov.), Sun-&oil-resistant TPE jacket.

Usage (Overall)

Suitable Applications: AC Motor Drives, VFD, Variable Frequency Drive

Physical Characteristics (Overall)

Conductor

AWG:

| # Conductors | AWG | Stranding | Conductor Material |
|--------------|-----|-----------|--------------------|
| 3 | 2 | 7x95x30 | TC - Tinned Copper |

Total Number of Conductors: 3

Ground Wire

Ground Wire (Y/N): Y

Ground Wire AWG: 6

Ground Wire Stranding: 7x37x30

Ground Wire Conductor Material: TC - Tinned Copper

Insulation

Insulation Material:

| Insulation Material | Wall Thickness (mm) |
|-------------------------------|---------------------|
| XLP - Cross Linked Polyolefin | 1.524 |

Insulation Resistance: 300 Megaohms/1000 ft.

Insulation Color Code Chart:

| Number | Color |
|--------|----------------------|
| 1 | Black and Numbered 1 |
| 2 | Black and Numbered 2 |
| 3 | Black and Numbered 3 |

Outer Shield

Outer Shield Material:

| Layer # | Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|---------|-------------------------|-------|------------------------------|--------------|
| 1 | Duofoil® | Tape | Aluminum Foil-Polyester Tape | 100 |
| 2 | | Braid | TC - Tinned Copper | 85 |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material | Nom. Wall Thickness (mm) |
|-------------------------------|--------------------------|
| TPE - Thermoplastic Elastomer | 2.362 |

Overall Cable

Overall Nominal Diameter: 30.658 mm

Mechanical Characteristics (Overall)

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| | |
|-----------------------------------|----------------|
| Wet Temperature Range: | -40°C To +90°C |
| Dry Temperature Range: | -40°C To +90°C |
| Bulk Cable Weight: | 2425.766 Kg/Km |
| Max. Recommended Pulling Tension: | 13736.042 N |
| Min. Bend Radius/Minor Axis: | 152.400 mm |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|-------------------------------|
| NEC/(UL) Specification: | TC-ER, Unlisted Singles, WTTC |
| NEC Articles: | 336 - ER |
| CEC/C(UL) Specification: | 600V Type CIC TC |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU CE Mark: | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 10/13/2005 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Flame Test

| | |
|------------------|-------------------|
| UL Flame Test: | UL1685 UL Loading |
| CSA Flame Test: | FT4 |
| IEEE Flame Test: | 1202 |

Suitability

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

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

46

Nom. Inductance:

Inductance (µH/m)

0.501993

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

131.24

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

236.232

Nom. Conductor DC Resistance:

METRIC MEASUREMENT VERSION

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DCR @ 20°C (Ohm/km)

0.52496

Max. Operating Voltage - UL:

Voltage

1000 V RMS (Flexible Motor Supply Cable)

600 V RMS (NEC Type TC)

Max. Recommended Current:

Current

130 Amps per conductor @ 30°C (per NEC)

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|----------------|----------|--------------|-------|-------|-----------------------------|
| 29507F 0102000 | 2,000 FT | 2,772.000 LB | BLACK | | 3 #2 XLPO + 3 #6 GRD SH TPE |

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