



Part Number: 29503X

Marine VFD, (3) 10 AWG (105x30) TC+Grd, XLP/XL-LSZH, Foil+TC Braid Shld, TC-ER

Product Description

Three 10 AWG stranded (105x30) tinned copper circuit conductors plus ground wire, cross-linked polyolefin insulation, overall Duofoil® (100% coverage) plus a tinned copper braid shield (85% coverage), HaloarrestXLink2 jacket.

Product Specifications

Technical Specifications

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

Construction and Dimensions

Conductor:

| Element | AWG | Stranding | Material | No. of Conductors |
|-------------|-----|-----------|--------------------|-------------------|
| | 10 | 105x30 | TC - Tinned Copper | 3 |
| Ground Wire | 10 | 105x30 | TC - Tinned Copper | |

| | |
|------------------------------------|---|
| Total Number of Conductors: | 3 |
|------------------------------------|---|

Insulation:

| Material | Nominal Wall Thickness |
|----------------------------------|------------------------|
| XLPE - Cross Linked Polyethylene | 0.045 in |
| XLP - Cross Linked Polyolefin | |

Stranding:

| Lay Length |
|------------|
| Y mm |

Outershield 1:

| Type | Layer | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|-------|-------|------------------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | 1 | Aluminum Foil-Polyester Tape | Duofoil® | 100 % | TC - Tinned Copper | 10 | 105x30 mm |
| Braid | 2 | TC - Tinned Copper | | 85 % | | | |

Outerjacket 1:

| Material | Nominal Diameter | Nominal Wall Thickness |
|-------------------|------------------|------------------------|
| HaloarrestXLink-2 | 0.69 in | 0.073 in |

Electrical Characteristics

Conductor DCR:

| Nominal Conductor DCR |
|-----------------------|
| 0.988 Ohm/1000ft |

Capacitance:

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 29 pF/ft | 53 pF/ft |

| Min Insulation Resistance: | 300 Megaohms/1000 ft. MOhm*1000ft |
|----------------------------|-----------------------------------|
|----------------------------|-----------------------------------|

Impedance:

| Nominal Characteristic Impedance |
|----------------------------------|
| 63 Ohm |

Current:

| Max. Recommended Current [A] |
|--|
| 40 Amps per conductor @ 30°C (per NEC) |

Inductance:

| Nominal Inductance |
|--------------------|
| 0.184 µH/ft |

Voltage:

| UL Voltage Rating |
|--|
| 1000 V RMS (Flexible Motor Supply Cable) |
| 600 V RMS (NEC Type TC) |

Use

| | |
|------------------------------------|---------|
| Suitability - Oil Resistance: | Yes |
| Suitability - Burial: | Yes |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | Yes |
| Suitability - Sunlight Resistance: | Yes |
| Max Recommended Pulling Tension: | 592 lbs |

Safety

| | |
|--------------------|-------------------|
| CSA Flammability: | FT4 |
| IEEE Flammability: | 1202 |
| UL Flammability: | UL1685 UL Loading |

Temperature Range

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

Mechanical Characteristics

| | |
|-----------------------------|--------|
| Min Bend Radius/Minor Axis: | 5.5 in |
|-----------------------------|--------|

Part Number

Standards

| | |
|-----------------------------------|----------------------------------|
| CA Prop 65 (CJ for Wire & Cable): | CA Prop 65 (CJ for Wire & Cable) |
| MII Order #39 (China RoHS): | MII Order #39 (China RoHS) |
| NEC Articles: | NEC Articles |
| NEC/(UL) Specification: | NEC/(UL) Specification |
| Other Specification: | Other Specification |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | EU CE Mark |

History

Product Variants

| Part Number | Color | Put-Up Type | Length |
|----------------|-------|-------------|---------|
| 29503X 0105000 | BLACK | Reel | 5000 ft |

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