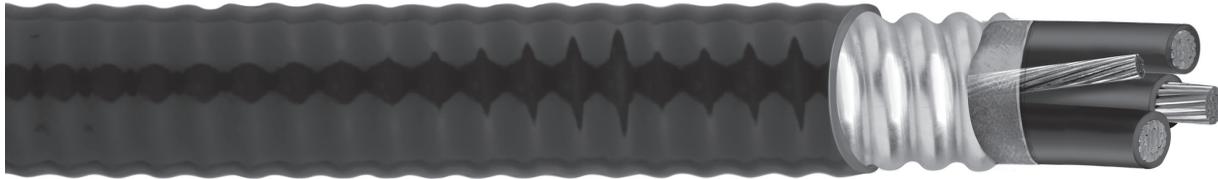


CCW® Armored Power, 3/C VFD

UL Type MC-HL, XLPE, 2000 V, 90°C, Cable Tray Use, Sunlight-Resistant, Direct Burial
UL Marine Shipboard Cable, ABS CWCMC



Product Construction:

Conductor:

- Bare annealed copper per ASTM B3
- 10 AWG and smaller are Class B compressed stranding per ASTM B8
- 8 AWG and larger are compact standing per ASTM B496

Insulation:

- Cross-linked Polyethylene (XLPE) insulation, 2000 V thicknesses per ICEA S-95-658
- Color-coded black with printed numbers per ICEA Method 4

Grounding Conductors:

- Class B stranded bare annealed copper per ASTM B3 and B8
- Three (3) split grounding wires per specification 9615 exceed the minimum required in NEC Table 250.122

Cable Assembly:

- Insulated conductors and grounding wires are cabled together with non-hygroscopic fillers when required
- A binder tape is applied over the cabled core

CCW Armor:

- Impervious, continuously welded and corrugated aluminum alloy sheath per UL 1569 and UL 2225
- CCW armor conductivity meets the grounding requirements of NEC Article 250

Jacket:

- Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC) — Black
- Low temperature performance meets ASTM D746 brittleness temperature at or below -40°C

Applications:

- Variable Frequency Drives: 3-conductor CCW armored cables with three (3) symmetrical grounding wires is the preferred wiring method for use with AC motors controlled by pulse-width modulated Inverters in VFD applications
- CCW armored cables offer an economical, rugged and reliable alternative to labor-intensive cable in conduit wiring methods
- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502 and 503
- For use as services, feeders and branch circuits for power, lighting, control, and signal circuits in accordance with NEC Articles 330 and 725
- Installed indoors or outdoors, wet or dry locations, directly buried, embedded in concrete, in a raceway, as aerial cable on a messenger, in cable trays, or as exposed runs secured to supports in accordance with NEC Article 330
- Recognized for use on fixed or floating offshore petroleum facilities as recommended by the American Petroleum Institute

Features:

- 90°C, 2000 V rated XLPE insulation with a dielectric constant less than 3.0 to withstand momentary voltage spikes common in certain VFD applications
- Three (3) oversized, symmetrical grounding wires recommended for use with pulse-width modulated AC drives
- CCW armor provides an impervious barrier to moisture, gas and liquids

Features (cont'd):

- CCW armor provides EMI shielding performance
- Factory assembled and tested cable for use as an alternative to cable in conduit wiring systems
- Meets cold bend and cold impact at -40C
- 90°C continuous operating temperature, wet or dry
- 130°C emergency rating
- 250°C short circuit rating

Specifications:

Design Adherence:

- ICEA S-95-658/WC70 Standard for Non-Shielded Power Cable, 2 kV or Less
- UL 44 Rubber Insulated Wires and Cables
- UL 1569 Metal Clad Cables
- UL 2225 Cables and Cable Fittings for Use in Hazardous Locations
- UL 1309 Marine Shipboard Cable

Flame Tests:

- IEEE 383 (70,000 BTU/hr)
- CSA FT4
- IEEE 1202 (70,000 BTU/hr)

Compliances:

- UL Type MC-HL, SUN RES, CT USE, DIR BUR, -40°C, 2000V, UL File # E90496
- UL Listed Marine Shipboard, UL File # E85994
- American Bureau of Shipping (ABS) Listed for CWCMC
- RoHS Compliant

CCW[®] Armored Power, 3/C VFD

UL Type MC-HL, XLPE, 2000 V, 90°C, Cable Tray Use, Sunlight-Resistant, Direct Burial
UL Marine Shipboard Cable, ABS CWCMC

| CATALOG NUMBER | COND. SIZE (AWG/kcmil) | NO. OF COND. | INSULATION THICKNESS | | BARE GROUND (AWG) | NOMINAL CORE O.D. | | NOMINAL ARMOR O.D. | | JACKET THICKNESS | | NOMINAL OVERALL O.D. | | APPROXIMATE NET WEIGHT | | 90°C AMPACITY @ 30°C AMBIENT ¹ |
|----------------|---------------------------------------|--------------|----------------------|------|-------------------|-------------------|------|--------------------|------|------------------|------|----------------------|------|------------------------|-----------|---|
| | | | mils | mm | | IN | mm | IN | mm | mils | mm | IN | mm | LBS/1000 FT | kg/1000 m | |
| 9615.01403318 | 14 (7/W) (2.08 mm ²) | 3 | 60 | 1.52 | 3 x #18 | 0.44 | 11.1 | 0.62 | 15.2 | 50 | 1.27 | 0.73 | 17.9 | 267 | 397 | 15 |
| 9615.01203316 | 12 (7/W) (3.31 mm ²) | 3 | 60 | 1.52 | 3 x #16 | 0.47 | 11.9 | 0.66 | 16.2 | 50 | 1.27 | 0.77 | 18.9 | 324 | 482 | 20 |
| 9615.01003314 | 10 (7/W) (5.26 mm ²) | 3 | 60 | 1.52 | 3 x #14 | 0.53 | 13.3 | 0.73 | 17.8 | 50 | 1.27 | 0.84 | 20.5 | 400 | 595 | 30 |
| 9615.00803314 | 8 (7/W) (8.36 mm ²) | 3 | 70 | 1.78 | 3 x #14 | 0.65 | 16.5 | 0.86 | 21.1 | 50 | 1.27 | 0.97 | 23.8 | 524 | 780 | 55 |
| 9615.00603312 | 6 (7/W) (13.3 mm ²) | 3 | 70 | 1.78 | 3 x #12 | 0.71 | 18.0 | 0.96 | 23.4 | 50 | 1.27 | 1.07 | 26.1 | 697 | 1037 | 75 |
| 9615.00403312 | 4 (7/W) (21.2 mm ²) | 3 | 70 | 1.78 | 3 x #12 | 0.81 | 20.6 | 1.09 | 26.6 | 50 | 1.27 | 1.23 | 30.1 | 1000 | 1488 | 95 |
| 9615.00203310 | 2 (7/W) (33.6 mm ²) | 3 | 70 | 1.78 | 3 x #10 | 0.94 | 23.9 | 1.25 | 30.6 | 50 | 1.27 | 1.36 | 33.3 | 1285 | 1912 | 130 |
| 9615.00103310 | 1 (19/W) (42.4 mm ²) | 3 | 90 | 2.29 | 3 x #10 | 1.13 | 28.7 | 1.48 | 36.1 | 50 | 1.27 | 1.59 | 38.8 | 1595 | 2374 | 150 |
| 9615.11003310 | 1/0 (19/W) (53.5 mm ²) | 3 | 90 | 2.29 | 3 x #10 | 1.21 | 30.6 | 1.55 | 38.0 | 60 | 1.52 | 1.68 | 41.2 | 1930 | 2872 | 170 |
| 9615.21003306 | 2/0 (19/W) (67.4 mm ²) | 3 | 90 | 2.29 | 3 x #6 | 1.30 | 32.9 | 1.68 | 41.0 | 60 | 1.52 | 1.81 | 44.2 | 2507 | 3731 | 195 |
| 9615.41003304 | 4/0 (19/W) (107 mm ²) | 3 | 90 | 2.29 | 3 x #4 | 1.53 | 38.7 | 1.91 | 46.7 | 60 | 1.52 | 2.04 | 49.9 | 3590 | 5342 | 260 |
| 9615.25003304 | 250 (37/W) (127 mm ²) | 3 | 105 | 2.67 | 3 x #4 | 1.61 | 41.0 | 1.91 | 48.6 | 60 | 1.52 | 2.04 | 51.9 | 3878 | 5770 | 290 |
| 9615.35003302 | 350 (37/W) (177 mm ²) | 3 | 105 | 2.67 | 3 x #2 | 1.93 | 48.9 | 2.41 | 58.9 | 75 | 1.91 | 2.57 | 62.8 | 5214 | 7759 | 350 |
| 9615.50003301 | 500 (37/W) (253 mm ²) | 3 | 105 | 2.67 | 3 x #1 | 2.20 | 55.8 | 2.68 | 65.5 | 75 | 1.91 | 2.84 | 69.5 | 6977 | 10382 | 430 |

Dimensions and weights are nominal; subject to industry tolerances.
¹ Ampacities in accordance with NEC Article 310 and Table 310.15(B)(16).

