TRAY CABLE - POWER - WITHOUT GROUND - 600V/1000V XHHW-2 CONDUCTORS (6 AWG - 4/0 AWG)

ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories® Standard UL-44, UL-1277, UL-1581, UL-1685, UL-2556; Compact Stranded Aluminum Alloy 8000 Series per ASTM B800, ASTM B801, ASTM B836; NFPA 70 (NEC®) Article 336; UL-1685 Method 1 (70,000 Btu/hr) Flame Test; NEMA WC70/ICEA S-95-658; ICEA T-29-520 (210,000 Btu/hr) Flame Test; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; IEEE 1202 (FT4) optional. UL Listing #E-179429



Patents: encorewire.com/patents

CONSTRUCTION

Conductors

Compact Stranded Conductors, Aluminum Alloy 8000 Series per ASTM B800, ASTM B801and ASTM B836

Insulation

High-dielectric strength, heat, and moisture-resistant, Cross-linked polyethylene (XLPE) rated at 90°C dry or wet to meet UL-44 requirements for Type XHHW-2 wire

Overall Jacket

A flame-retardant, sunlight-resistant black PVC jacket is applied over core.

Assembly

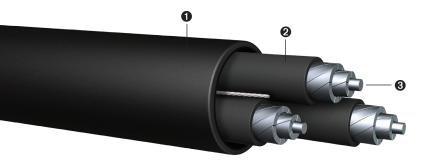
The insulated conductors are cabled together, without a ground. Nylon rip-cord is supplied for easy stripping; overall black PVC jacket.

Color Coding

Black insulation with ICEA Method 4 printed number

APPLICATIONS

Primarily used for connect power devices in an commercial and industrial environment. Suitable for installation in electrical channels, ducts, wireways, cable trays, and raceways. Approved for direct burial in wet or dry locations and outdoors in cable trays where sunlight-resistant rating is required. Encore Wire's Type TC-ER is acceptable for use in Class 1, Division 2 and Class 2, Division 2 locations where utilized with listed fittings rated for the classified location and condition of exposure to which the listed fittings are applied.



- PVC Jacket
- 2 XLPE Insulation
- 3 Compact Stranded Conductor, AA-8000 Series

| Size | Size No.of (AWG) Conductors | | No. of | Outer Jacket Thickness PVC (in) | | Outside Diameter (in) | | Approximate Net Weight (lbs/1000 ft) | | Allowable Ampacity (Amps)¹ | | Standard Packaging |
|-----------------------|--------------------------------|---|---------|---------------------------------------|-------|-----------------------------|-------|--------------------------------------------|------|-------------------------------|------|------------------------|
| | | | Strands | 3 | 4 | 3 | 4 | 3 | 4 | 75°C | 90°C | (ft) |
| 6 ² | 3 | 4 | 7 | 0.060 | 0.060 | 0.678 | 0.745 | 260 | 325 | 50 | 55 | 1000' 4000' Reels |
| 4 ³ | 3 | 4 | 7 | 0.060 | 0.080 | 0.773 | 0.891 | 316 | 404 | 65 | 75 | 1000' 3000' Reels |
| 3 ³ | 3 | 4 | 7 | 0.080 | 0.080 | 0.867 | 0.952 | 384 | 490 | 75 | 85 | 1000' 2000' Reels |
| 2 ³ | 3 | 4 | 7 | 0.080 | 0.080 | 0.931 | 1.024 | 459 | 676 | 90 | 100 | 1000' 2000' Reels |
| 13 | 3 | 4 | 8 | 0.080 | 0.080 | 1.041 | 1.147 | 569 | 734 | 100 | 115 | 1000' 2000' Reels |
| 1/03 | 3 | 4 | 10 | 0.080 | 0.080 | 1.121 | 1.237 | 675 | 855 | 120 | 135 | 1000' 2000' Reels |
| 2/0 ³ | 3 | 4 | 12 | 0.080 | 0.080 | 1.207 | 1.333 | 804 | 1002 | 135 | 150 | 500' 1000' 2000' Reels |
| 3/03 | 3 | 4 | 15 | 0.080 | 0.080 | 1.309 | 1.447 | 957 | 1200 | 155 | 175 | 1000' 2000' Reels |
| 4/03 | 3 | 4 | 19 | 0.080 | 0.080 | 1.421 | 1.572 | 1153 | 1451 | 180 | 205 | 1000' 1500' Reels |

¹ For ampacities see NEC Table 310.15(B)(16) for insulated conductors; not more than three current-carrying conductors in a raceway, cable, or earth (directly buried), based on ambient temperature of 30°C (86°F). NEC Article 310.15(B)(2)(a) for ambient temperature correction factors for temperatures other than 30°C (86°F).

The above data is approximate and subject to manufacturing tolerances.



Last Edit: 5/21/24

NEC Table 310.15(B)(3)(a) for ampacity adjustment factors, as applicable, for more than three current-carrying conductors.

NEC Article 110.14(C) for conductor temperature limitations for equipment rated 100 amps or less, or for equipment rated for more than 100 amps.

² TVIDE TC-ER-JP PRINT LEGEND: ENCORE WIRE CORPORATION (SIZE) TYPE TC-ER-JP CABLE THIN OR THWN-2 AA-8000 AL CDRS SUN-RES 600V/1000V DIR-BUR (ULL) DATE/TIME/OPER/OC MACHINE

³ Type TC only PRINT LEGEND: ENCORE WIRE CORPORATION (SIZE) TYPE TC CABLE THHN OR THWN-2 AA-8000 AL CDRS SUN-RES 600V/1000V DIR-BUR (UL) DATE/TIME/OPER/QC

TRAY CABLE - POWER - WITHOUT GROUND - 600V/1000V XHHW-2 CONDUCTORS (250 KCMIL - 900 KCMIL)

ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories® Standard UL-44, UL-1277, UL-1581, UL-1685, U-2556; Compact Stranded Aluminum Alloy 8000 Series per ASTM B800, ASTM B801, ASTM B836; NFPA 70 (NEC®) Article 336; UL-1685 Method 1 (70,000 Btu/hr) Flame Test; NEMA WC70/ICEA S-95-658; ICEA T-29-520 (210,000 Btu/hr) Flame Test; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; IEEE 1202 (FT4) optional. UL Listing #E-179429



CONSTRUCTION

Conductors

Compact Stranded Conductors, Aluminum Alloy 8000 Series per ASTM B800, ASTM B801 and ASTM B836

Insulation

High-dielectric strength, heat, and moisture-resistant, Cross-linked polyethylene (XLPE) rated at 90°C dry or wet to meet UL-44 requirements for Type XHHW-2 wire

Overall Jacket

A flame-retardant, sunlight-resistant black PVC jacket is applied over core.

Assembly

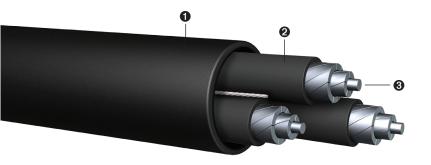
The insulated conductors are cabled together, without a ground. Nylon rip-cord is supplied for easy stripping; overall black PVC jacket.

Color Coding

Black insulation with ICEA Method 4 printed number

APPLICATIONS

Primarily used for connect power devices in an commercial and industrial environment. Suitable for installation in electrical channels, ducts, wireways, cable trays, and raceways. Approved for direct burial in wet or dry locations and outdoors in cable trays where sunlight-resistant rating is required. Encore Wire's Type TC-ER is acceptable for use in Class 1, Division 2 and Class 2, Division 2 locations where utilized with listed fittings rated for the classified location and condition of exposure to which the listed fittings are applied.



PVC Jacket

2 XLPE Insulation

3 Compact Stranded Conductor, AA-8000 Series

| Size | Size No. of (AWG) Conductors | | No. of Strands | Outer Jacket Thickness PVC (in) | | Outside Diameter (in) | | Approximate Net Weight (lbs/1000 ft) | | Allowable Ampacity (Amps)¹ | | Standard Packaging |
|------|------------------------------|---|-------------------|---------------------------------------|-------|-----------------------------|-------|--------------------------------------------|------|-------------------------------|------|-----------------------|
| | | | | 3 | 4 | 3 | 4 | 3 | 4 | 75°C | 90°C | (ft) |
| 250 | 3 | 4 | 22 | 0.080 | 0.110 | 1.561 | 1.789 | 1372 | 1807 | 205 | 230 | 1000' 1500' Reels |
| 300 | 3 | 4 | 21 | 0.110 | 0.110 | 1.729 | 1.910 | 1687 | 2104 | 230 | 260 | 1000' 1500' Reels |
| 350 | 3 | 4 | 24 | 0.110 | 0.110 | 1.828 | 2.021 | 1913 | 2395 | 250 | 280 | 1000' 1500' Reels |
| 400 | 3 | 4 | 27 | 0.110 | 0.110 | 1.920 | 2.125 | 2099 | 2633 | 270 | 305 | 1000' 1500' Reels |
| 500 | 3 | 4 | 34 | 0.110 | 0.110 | 2.086 | 2.311 | 2534 | 3184 | 310 | 350 | 1000' 1500' Reels |
| 600 | 3 | 4 | 41 | 0.110 | 0.110 | 2.313 | 2.564 | 3088 | 3883 | 340 | 385 | 1000' 1500' Reels |
| 700 | 3 | 4 | 45 | 0.110 | 0.140 | 2.455 | 2.783 | 3500 | 4513 | 375 | 425 | 1000' 1500' Reels |
| 750 | 3 | 4 | 47 | 0.110 | 0.140 | 2.522 | 2.858 | 3723 | 4830 | 385 | 435 | 1000' 1500' Reels |
| 900 | 3 | 4 | 58 | 0.140 | 0.140 | 2.778 | 3.078 | 4483 | 5631 | 425 | 480 | 1000' 1500' Reels |

¹ For ampacities see NEC Table 310.15(B)(16) for insulated conductors; not more than three current-carrying conductors in a raceway, cable, or earth (directly buried), based on ambient temperature of 30°C (86°F). See 2011 NEC Article 310.15(B)(2)(a) for ambient temperature correction factors for temperatures other than 30°C (86°F).

PRINT LEGEND: ENCORE WIRE CORP (SIZE) TYPE TC CABLE XHHW-2 AA-8000 AL CDRS SUN-RES 600V/1000V DIR-BUR (UL) DATE/TIME/OPER/QC

ENCORE WIRE

Last Edit: 5/21/24

See 2011 NEC Table 310.15(B)(3)(a) for ampacity adjustment factors, as applicable, for more than three current-carrying conductors.

See 2011 NEC Article 110.14(C) for conductor temperature limitations for equipment rated 100 amps or less, or for equipment rated for more than 100 amps.

The above data is approximate and subject to manufacturing tolerances.