

# TYPE TC - POWER CABLE - WITH GROUND - 600V

## 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-FT4/IEEE 1202 (70,000 Btu/hr) Flame Test; NEMA WC70/ICEA S-95-658; ICEA T-29-520 (210,000 Btu/hr) Flame Test; ARRA 2009 Section 1605 "Buy American" Compliant; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E - 179429



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

#### Ground Conductor

Compact Stranded Conductors, Aluminum Alloy 8000 Series per ASTM B800, ASTM B801 and ASTM B836. *Insulated green ground.*

#### Overall Jacket

A flame-retardant, sunlight-resistant black PVC jacket is applied over core. Sunlight-resistant, overall jacket available in all colors by request.

#### Assembly

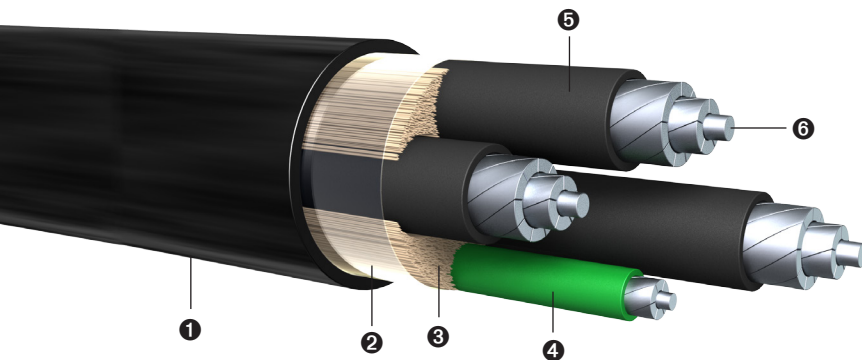
The insulated conductors are cabled together, with an insulated or bare ground and fillers as required, to form a round compact core. Nylon rip-cord is supplied for easy stripping; overall black PVC jacket.

#### 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. Cable constructed and listed for applications requiring type TC-ER rating. Approved for Class I Division II Hazardous Locations.



- ❶ PVC Jacket
- ❷ Tape Separator
- ❸ Non-Metallic Fillers (as required)
- ❹ Green Insulated Compact Stranded Ground Conductor, AA-8000 Series (as required)
- ❺ XLPE Insulation
- ❻ Compact Stranded Conductor, AA-8000 Series

Size (AWG)	No. of Conductors	No. of Strands	Ground		Outer Jacket Thickness PVC (in)		Outside Diameter (in)		Approximate Net Weight (lbs/1000 ft)		Allowable Ampacity (Amps) <sup>1</sup>		Standard Packaging (ft)
			Size of Green Ground Wire (AWG)	No. of Strands	3	4	3	4	3	4	75°C	90°C	
6	3	4	7	7	0.060	0.060	0.703	0.773	255	304	50	55	1000' 4000' Reels
4	3	4	7	7	0.060	0.080	0.784	0.918	353	457	65	75	1000' 3000' Reels
3	3	4	7	7	0.080	0.080	0.877	0.975	430	523	75	85	1000' 2000' Reels
2	3	4	7	7	0.080	0.080	0.939	1.039	496	618	90	100	1000' 2000' Reels
1	3	4	8	7	0.080	0.080	1.041	1.147	630	787	100	115	1000' 2000' Reels
1/0	3	4	10	7	0.080	0.080	1.121	1.237	733	907	120	135	1000' 2000' Reels
2/0	3	4	12	7	0.080	0.080	1.207	1.333	864	1069	135	150	500' 1000' 2000' Reels
3/0	3	4	15	7	0.080	0.080	1.309	1.447	1024	1273	155	175	1000' 2000' Reels
4/0	3	4	19	7	0.080	0.080	1.421	1.572	1236	1550	180	205	1000' 1500' Reels

<sup>1</sup> 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). 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. The above data is approximate and subject to manufacturing tolerances.

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

# TYPE TC - POWER CABLE - WITH GROUND - 600V

## XHHW-2 CONDUCTORS (250 KCMIL - 900 KCMIL)

### 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-FT4/IEEE 1202 (70,000 Btu/hr) Flame Test; NEMA WC70/ICEA S-95-658; ICEA T-29-520 (210,000 Btu/hr) Flame Test; ARRA 2009 Section 1605 "Buy American" Compliant; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E - 179429



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

#### Ground Conductor

Compact Stranded Conductors, Aluminum Alloy 8000 Series per ASTM B800, ASTM B801, ASTM B836. *Insulated green ground.*

#### Overall Jacket

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

#### Assembly

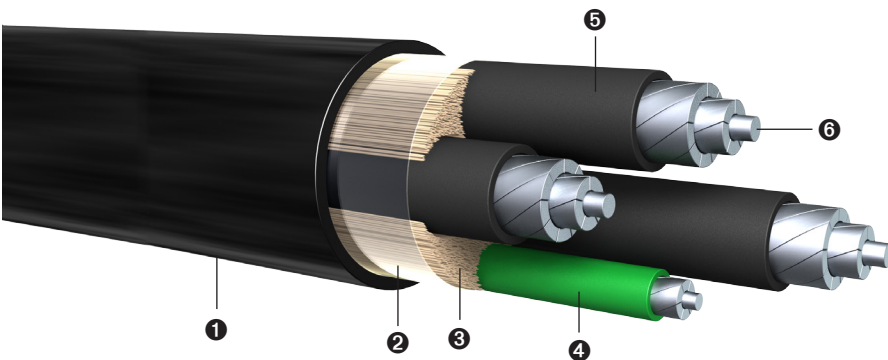
The insulated conductors are cabled together, with an insulated or bare ground and fillers as required, to form a round compact core. Nylon rip-cord is supplied for easy stripping; overall black PVC jacket.

#### 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. Cable constructed and listed for applications requiring type TC-ER rating. Approved for Class I Division II Hazardous Locations.



- 1 PVC Jacket
- 2 Tape Separator
- 3 Non-Metallic Fillers (as required)
- 4 Green Insulated Compact Stranded Ground Conductor, AA-8000 Series (as required)
- 5 XLPE Insulation
- 6 Compact Stranded Conductor, AA-8000 Series

Size (AWG)	No. of Conductors		No. of Strands	Ground		Outer Jacket Thickness PVC (in)		Outside Diameter (in)		Approximate Net Weight (lbs/1000 ft)		Allowable Ampacity (Amps) <sup>1</sup>		Standard Packaging (ft)
				Size of Green Ground Wire (AWG)	No. of Strands	3	4	3	4	3	4	75°C	90°C	
250	3	4	22	2 AWG Insulated Green	7	0.080	0.110	1.561	1.789	1420	1855	205	230	1000' 1500' Reels
300	3	4	21	2 AWG Insulated Green	7	0.110	0.110	1.729	1.910	1735	2152	230	260	1000' 1500' Reels
350	3	4	24	2 AWG Insulated Green	7	0.110	0.110	1.828	2.021	1961	2443	250	280	1000' 1500' Reels
400	3	4	27	1 AWG Insulated Green	8	0.110	0.110	1.920	2.125	2159	2692	270	305	1000' 1500' Reels
500	3	4	34	1 AWG Insulated Green	8	0.110	0.110	2.086	2.311	2593	3243	310	350	1000' 1500' Reels
600	3	4	41	1 AWG Insulated Green	8	0.110	0.110	2.313	2.564	3148	3943	340	385	1000' 1500' Reels
700	3	4	45	1/0 AWG Insulated Green	10	0.110	0.140	2.455	2.783	3575	4588	375	425	1000' 1500' Reels
750	3	4	47	1/0 AWG Insulated Green	10	0.110	0.140	2.522	2.858	3798	4905	385	435	1000' 1500' Reels
900	3	4	58	1/0 AWG Insulated Green	10	0.140	0.140	2.778	3.078	4558	5706	425	480	1000' 1500' Reels

<sup>1</sup> 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).  
 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.  
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