

# TYPE TC - POWER CABLE - WITHOUT GROUND - 600V

## THHN/THWN-2 CONDUCTORS (6 AWG - 4/0 AWG)

### ENGINEERING SPECIFICATIONS

#### Standards

Underwriters Laboratories® Standard UL-83, UL-1277, UL-1581, UL-1685, UL-2556; ASTM 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



### CONSTRUCTION

#### Conductors

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

#### Insulation

High-dielectric strength, heat, and moisture-resistant, colored Polyvinyl Chloride (PVC) rated for continuous use at 90°C dry or wet to meet UL-83 requirements for Type THHN or THWN-2 wire

#### Assembly

The insulated conductors are cabled together, without a ground and with fillers as required, to form a round compact core. Nylon rip-cord is supplied for easy stripping.

#### Color Coding

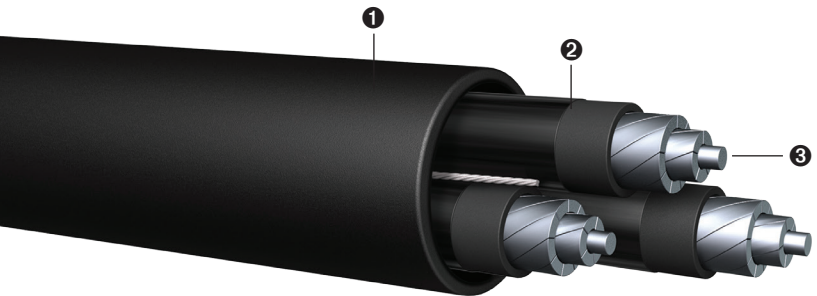
Black insulation with ICEA Method 4 printed number

#### Overall Jacket

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

### 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.



- ① PVC Jacket
- ② PVC Insulation w/ Nylon Jacket
- ③ Compact Stranded Conductor, AA-8000 Series

Size (AWG)	No. of Conductors		No. of Strands	Outer Jacket Thickness PVC (in)		Outside Diameter (in)		Approximate Net Weight (lbs/1000 ft)		Allowable Ampacity (Amps) <sup>1</sup>		Standard Packaging (ft)
				3	4	3	4	3	4	75°C	90°C	
6 <sup>2</sup>	3	4	7	0.060	0.060	0.650	0.714	238	296	50	55	1000' 4000' Reels
4	3	4	7	0.060	0.080	0.795	0.916	341	424	65	75	1000' 3000' Reels
3	3	4	7	0.080	0.080	0.888	0.976	404	516	75	85	1000' 2000' Reels
2	3	4	7	0.080	0.080	0.996	1.097	478	597	90	100	1000' 2000' Reels
1	3	4	8	0.080	0.080	1.067	1.176	599	774	100	115	1000' 2000' Reels
1/0	3	4	10	0.080	0.080	1.149	1.268	706	898	120	135	1000' 2000' Reels
2/0	3	4	12	0.080	0.080	1.235	1.365	834	1039	135	150	1000' 2000' Reels
3/0	3	4	15	0.080	0.080	1.337	1.478	994	1242	155	175	1000' 2000' Reels
4/0	3	4	19	0.080	0.080	1.449	1.604	1188	1501	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.

<sup>2</sup> Rated Type TC or TC-ER

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

# TYPE TC - POWER CABLE - WITHOUT GROUND - 600V

## THHN/THWN-2 CONDUCTORS (250 KCMIL - 900 KCMIL)

### ENGINEERING SPECIFICATIONS

#### Standards

Underwriters Laboratories® Standard UL-83, UL-1277, UL-1581, UL-1685, UL-2556; ASTM Compact Standard 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



### 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, colored Polyvinyl Chloride (PVC) rated for continuous use at 90°C dry or wet to meet UL-83 requirements for Type THHN or THWN-2 wire

#### Assembly

The insulated conductors are cabled together, without a ground and with fillers as required, to form a round compact core. Nylon rip-cord is supplied for easy stripping.

#### Color Coding

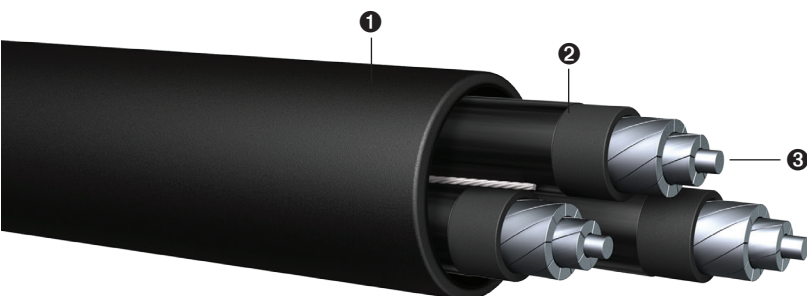
Black insulation with ICEA Method 4 printed number

#### Overall Jacket

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

### 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.



- ❶ PVC Jacket
- ❷ PVC Insulation w/ Nylon Jacket
- ❸ Compact Stranded Conductor, AA-8000 Series

Size (AWG)	No. of Conductors		No. of Strands	Outer Jacket Thickness PVC (in)		Outside Diameter (in)		Approximate Net Weight (lbs/1000 ft)		Allowable Ampacity (Amps) <sup>1</sup>		Standard Packaging (ft)
				3	4	3	4	3	4	75°C	90°C	
250	3	4	22	0.080	0.110	1.594	1.827	1429	1895	205	230	1000' 1500' Reels
300	3	4	21	0.110	0.110	1.762	1.948	1747	2183	230	260	1000' 1500' Reels
350	3	4	24	0.110	0.110	1.866	2.064	1974	2471	250	280	1000' 1500' Reels
400	3	4	27	0.110	0.110	1.954	2.163	2195	2759	270	305	1000' 1500' Reels
500	3	4	34	0.110	0.110	2.121	2.350	2631	3308	310	350	1000' 1500' Reels
600	3	4	41	0.110	0.110	2.337	2.592	3163	3979	340	385	1000' 1500' Reels
700	3	4	45	0.110	0.140	2.475	2.806	3580	4622	375	425	1000' 1500' Reels
750	3	4	47	0.110	0.140	2.542	2.882	3796	4923	385	435	1000' 1500' Reels
900	3	4	58	0.140	0.140	2.799	3.102	4561	5742	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.

The above data is approximate and subject to manufacturing tolerances.

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