TYPE TC - POWER CABLE - W/ INSULATED GROUND
THHN/THWN-2 INNERS

ENGINEERING SPECIFICATIONS

Standards
Underwriters Laboratories Standard UL-83, UL-1277, UL-1581, UL-2556; ASTM Stranding Class B3, B8, B787; NFPA 70 (NEC®) Article 336, 392, 725; NEMA WC 57/ICEA S-73-532; UL 1685-FT4/IEEE 1202 (70,000 Btu/hr) Flame Test; 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

RoHS COMPLIANT

Listed E-179429

CONSTRUCTION

Conductors
Bare, soft-annealed stranded copper conductors per ASTM-B3, ASTM-B8 and ASTM-B787

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

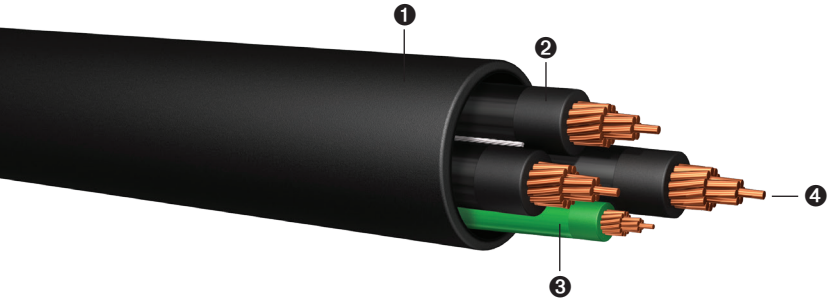
Ground Conductor
Soft, uncoated copper per ASTM-B787; insulated green ground

Assembly
The insulated conductors are cabled together with or without a bare ground and with or without 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
Flame retardant, sunlight-resistant, black PVC jacket. Sunlight-resistant overall jacket available in all colors by request.

APPLICATIONS
Primarily used for connecting power devices in commercial and industrial environments. Suitable for installation in 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. Cables constructed and listed for applications requiring TC-ER-JP rating. Approved for Class I Division II Hazardous Locations.



1. PVC Jacket
2. PVC Insulation w/ Nylon Jacket
3. Green Insulated Grounding Conductor
4. THHN/THWN-2 Stranded Copper Conductors

Size (AWG)	No. of Conductors		Size of Ground Wire (AWG)	Outside Jacket Thickness PVC (in)		Outside Diameter (in)		Allowable Ampacity (Amps)[1]			Approximate Net Weight (lbs/1000 ft)		Standard Packaging (ft)
				3	4	3	4	60°C	75°C	90°C	3	4	
8	3	4	10 AWG Green Insulated	0.060	0.060	0.624	0.674	40	50	55	312.03	380.01	1000' 5000' Reels
6	3	4	8 AWG Green Insulated	0.060	0.060	0.714	0.789	55	65	75	447.85	559.40	1000' 4000' Reels
4	3	4	8 AWG Green Insulated	0.080	0.080	0.904	1.009	70	85	95	689.94	875.65	1000' 3000' Reels
3	3	4	6 AWG Green Insulated	0.080	0.080	0.946	1.035	85	100	115	820.81	1,021.87	1000' 3000' Reels
2	3	4	6 AWG Green Insulated	0.080	0.080	1.015	1.112	95	115	130	977.42	1224.41	1000' 2000' Reels
1	3	4	6 AWG Green Insulated	0.080	0.080	1.137	1.250	110	130	145	1218.33	1535.61	1000' 2000' Reels
1/0	3	4	6 AWG Green Insulated	0.080	0.080	1.201	1.314	125	150	170	1438.73	1814.15	1000' 2000' Reels
2/0	3	4	6 AWG Green Insulated	0.080	0.080	1.276	1.410	145	175	195	1720.21	2195.81	500' 1000' 2000' Reels
3/0	3	4	4 AWG Green Insulated	0.080	0.080	1.428	1.571	165	200	225	2179.36	2767.05	1000' 2000' Reels
4/0	3	4	4 AWG Green Insulated	0.080	0.110	1.525	1.726	195	230	260	2603.99	3386.86	1000' 1500' Reels

[1] Ampacity of conductors are based on the National Electrical Code (NFPA 70) Table 310.15(B)(16). See 110.14(C), 240.4(D) and 310.15(B) for other limitations where applicable.
60°C when terminated to equipment for circuits rated 100 amperes or less or marked for size 14 AWG through 1 AWG conductor.
75°C when terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG.
90°C for ampacity derating purposes.
When the neutral is considered current-carrying conductor, the ampacity of 4/C cables shall be reduced by a factor of 0.80 per NEC 310.15(B)(3)(a).
The above data is approximate and subject to normal manufacturing tolerances.

8 AWG THROUGH 4/0 AWG ARE 19 STRANDS PER CONDUCTOR
PRINT LEGEND: ENCORE WIRE CORPORATION (SIZE) TYPE TC-ER-JP CABLE THHN OR THWN-2 CDRS SUN-RES 600V DIR-BUR (UL) DATE/TIME/OPER/QC

ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories Standard UL-83, UL-1277, UL-1581, UL-2556; ASTM Stranding Class B3, B8, B787; NFPA 70 (NEC®); Article 336, 392; NEMA WC 57/ICEA S-73-532; UL 1685-FT4/IEEE 1202 (70,000 Btu/hr) Flame Test; 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

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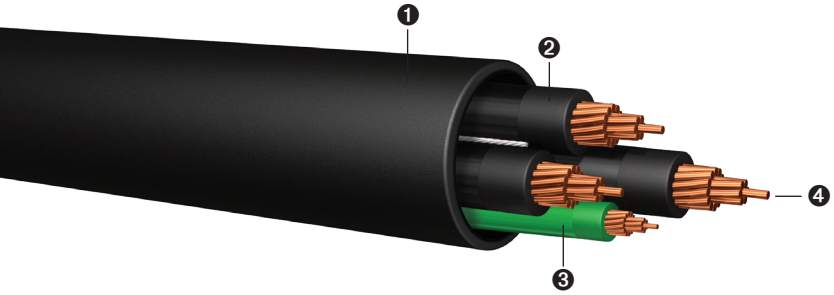

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				3	4	3	4	60°C	75°C	90°C	3	4	
250	3	4	4 AWG Green Insulated	0.080	0.110	1.621	1.857	215	255	290	3039.72	3994.90	1000' 1500' Reels
300	3	4	3 AWG Green Insulated	0.110	0.110	1.793	2.026	240	285	320	3686.20	4796.60	1000' 1500' Reels
350	3	4	3 AWG Green Insulated	0.110	0.110	1.894	2.140	260	310	350	4220.67	5499.26	1000' 1500' Reels
400	3	4	3 AWG Green Insulated	0.110	0.110	1.989	2.208	280	335	380	4748.05	6121.09	1000' 1500' Reels
500	3	4	2 AWG Green Insulated	0.110	0.110	2.164	2.402	320	380	430	5768.74	7441.04	1000' 1500' Reels
600	3	4	2 AWG Green Insulated	0.110	0.110	2.429	2.694	350	420	475	6950.15	8960.92	1000' 1500' Reels
750	3	4	1 AWG Green Insulated	0.110	0.140	2.647	2.998	400	475	535	8626.37	11286.42	1000' 1500' Reels

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