CU 600/1000V XLPE Insulation PVC Jacket XHHW-2. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

Type TC-ER Power Cable 600 or 1000 Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Polyvinyl Chloride (PVC) Jacket with 1 Copper Ground (Bare or Insulated). CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free.

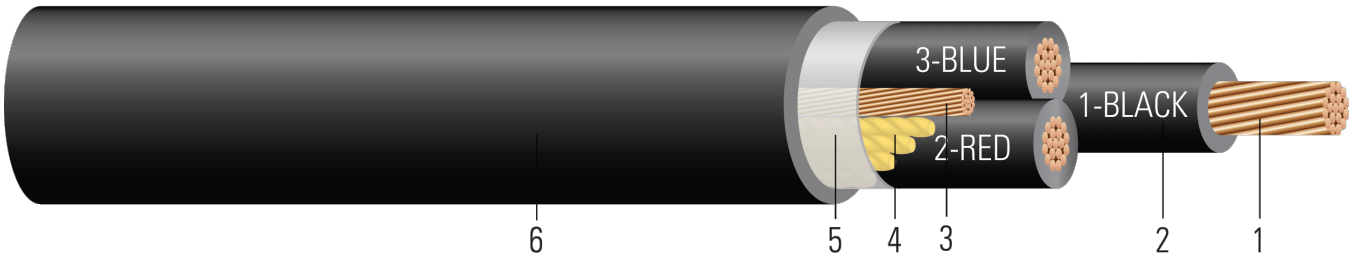

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
3. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8. (When present, cable conductor sizes 8 & 6 AWG have an insulated green ground)
4. **Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
5. **Binder:** Polyester flat thread binder tape for cable sizes larger than 2 AWG
6. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 or 1000 Volt Type TC-ER power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. Constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10. Sunlight Resistant - For Direct Burial - Silicone Free

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- ICEA S-58-679 Cable Conductor Identification Method 3 (1-BLACK, 2-RED, 3-BLUE)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 383 Flame Test (70,000 btu)

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SAMPLE PRINT LEGEND:

Bare Ground: {SQFTG} SOUTHWIRE® {UL} XX AWG (X.XX{mm2}) 3/C TYPE TC-ER XHHW-2 CDRS 90°C JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V or 1000V {NOM}-ANCE XHHW-2 CT SR 600V 90C

Green Ground: {SQFTG} SOUTHWIRE® {UL} XX AWG (X.XX{mm2}) CU 3/C TYPE TC-ER XHHW-2 CDRS GW 1 X X AWG CU GREEN INSULATED 90°C JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V or 1000V {NOM}-ANCE XHHW-2 CT SR 600V 90C

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	Jacket Color
	AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	mil	inch	lb/1000ft	lb/1000ft	
555196◊	8	3	7	0.142	45	1 x 10	60	0.627	154	284	BK
555195	6	3	7	0.178	45	1 x 8	60	0.714	246	390	BK
480616◊	4	3	7	0.225	45	1 x 8	60	0.815	442	613	BK
480624◊	2	3	7	0.283	45	1 x 6	80	0.982	703	923	BK
480632◊	1	3	19	0.322	55	1 x 6	80	1.117	865	1137	BK
480640◊	1/0	3	19	0.362	55	1 x 6	80	1.213	1070	1396	BK
480657◊	2/0	3	19	0.405	55	1 x 6	80	1.304	1327	1684	BK
480665◊	3/0	3	19	0.456	55	1 x 4	80	1.412	1700	2073	BK
480673◊	4/0	3	19	0.512	55	1 x 4	80	1.507	2110	2540	BK
480681◊	250	3	37	0.558	65	1 x 4	80	1.641	2469	2939	BK
672206	350	3	37	0.661	65	1 x 1	115	1.915	3536	4258	BK
480707◊	350	3	37	0.661	65	1 x 3	115	1.919	3439	4088	BK
588013	350	3	37	0.661	65	1 x 3/0	115	2.117	3798	4531	BK
480715	400	3	37	0.706	65	1 x 3	115	2.014	3906	4644	BK
582435	500	3	37	0.789	65	1 x 2	110	2.177	4885	5728	BK
890148	500	3	37	0.789	65	1 x 1/0	115	2.189	5007	5824	BK
583697	500	3	37	0.789	65	1 x 2/0	115	2.274	5093	5956	BK
593173	600	3	61	0.866	80	1 x 3/0	115	2.418	6136	7120	BK
890388◊	600	3	61	0.866	80	1 x 2	115	2.418	5820	6736	BK
665766	600	3	61	0.866	80	1 x 1/0	115	2.418	5942	6926	BK
665768	600	3	61	0.866	80	1 x 400	115	2.503	6860	7877	BK
672210	600	3	61	0.866	80	1 x 250	115	2.546	6393	7418	BK
554410	750	3	61	0.968	80	1 x 1	115	2.694	7277	8521	BK
589359	750	3	61	0.968	80	1 x 4/0	115	2.694	7676	8919	BK

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
GG: Green Insulated Ground
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
555196◊	8	3	2.5	396	0.653	0.81	0.052	50	55
555195	6	3	2.9	629	0.411	0.51	0.051	65	75
480616◊	4	3	3.3	1001	0.258	0.32	0.048	85	95
480624◊	2	3	3.9	1592	0.162	0.201	0.045	115	130
480632◊	1	3	5.6	2008	0.128	0.159	0.046	130	145
480640◊	1/0	3	6.1	2534	0.102	0.127	0.044	150	170
480657◊	2/0	3	6.5	3194	0.082	0.102	0.043	175	195
480665◊	3/0	3	7.1	4027	0.064	0.079	0.042	200	225
480673◊	4/0	3	7.5	5078	0.051	0.063	0.041	230	260
480681◊	250	3	8.2	6000	0.043	0.053	0.041	255	290
672206	350	3	9.6	8400	0.031	0.039	0.04	310	350
480707◊	350	3	9.6	8400	0.031	0.039	0.04	310	350
588013	350	3	12.7	8400	0.031	0.039	0.04	310	350
480715	400	3	12.1	9600	0.027	0.035	0.04	335	380
582435	500	3	13.1	12000	0.021	0.027	0.039	380	430
890148	500	3	13.1	12000	0.021	0.027	0.039	380	430
583697	500	3	13.6	12000	0.021	0.027	0.039	380	430
593173	600	3	14.5	14400	0.018	0.024	0.039	420	475
890388◊	600	3	14.5	14400	0.018	0.024	0.039	420	475
665766	600	3	14.5	14400	0.018	0.024	0.039	420	475
665768	600	3	15	14400	0.018	0.024	0.039	420	475
672210	600	3	15.3	14400	0.018	0.024	0.039	420	475
554410	750	3	16.2	18000	0.014	0.019	0.038	475	535
589359	750	3	16.2	18000	0.014	0.019	0.038	475	535

***** Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.

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