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 Four Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Polyvinyl Chloride (PVC) Jacket with 1 Bare CU Ground. Silicone Free. 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 (cable size 8 & 6 has 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
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-58-679 Control 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 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test

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SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE® {UL} XXX KCMIL (XXX{mm2}) CU 4/C TYPE TC-ER XHHW-2 CDRS GW 1 X X AWG CU 90°C JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V or 1000V {NOM}-ANCE {YYYY}

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
	AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	mil	inch	lb/1000ft	lb/1000ft
557009	8	4	7	0.141	45	1 x 10	60	0.755	238	403
560102	6	4	7	0.177	45	1 x 8	60	0.902	378	613
556993	4	4	7	0.225	45	1 x 8	80	0.918	572	804
554303	2	4	7	0.282	45	1 x 6	80	1.046	909	1185
602011	1	4	19	0.322	55	1 x 6	80	1.202	1125	1496
554436	1/0	4	19	0.361	55	1 x 6	80	1.299	1399	1754
556985	2/0	4	19	0.405	55	1 x 6	80	1.420	1742	2144
602037	3/0	4	19	0.456	55	1 x 4	80	1.521	2223	2693
554444	4/0	4	19	0.512	55	1 x 4	110	1.721	2769	3425
602052	250	4	37	0.558	65	1 x 4	110	1.842	3248	4003
675713	350	4	37	0.661	65	1 x 1	110	2.081	4627	5524
644547	350	4	37	0.661	65	1 x 3	110	2.093	4530	5437
602078	350	4	37	0.661	65	1 x 3	110	2.095	4530	5351
TBA	350	4	37	0.661	65	1 x 3	110	2.136	4525	5275
672237	500	4	37	0.789	65	1 x 1/0	110	2.382	6566	7656
675711	500	4	37	0.789	65	1 x 2/0	110	2.382	6652	7742
672235	500	4	37	0.789	65	1 x 1	110	2.382	6498	7588
554469	500	4	37	0.789	65	1 x 2	110	2.382	6443	7427
672240	500	4	37	0.789	65	1 x 4/0	110	2.511	6896	8014
675706	600	4	61	0.865	80	1 x 1/0	140	2.723	7813	9264
665772	600	4	61	0.865	80	1 x 350	145	2.858	8575	10061
649649	600	4	61	0.865	80	1 x 4/0	140	2.867	8144	9633
675708	600	4	61	0.865	80	1 x 250	140	2.903	8263	9741
570961	750	4	61	0.968	80	1 x 1	140	2.962	9616	11320

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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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 60°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
557009	8	4	3.0	422	0.653	0.786	0.052	32	40	44
560102	6	4	3.6	671	0.411	0.495	0.051	44	52	60
556993	4	4	3.7	1068	0.258	0.310	0.048	56	68	76
554303	2	4	5.2	1698	0.162	0.195	0.045	76	92	104
602011	1	4	6.0	2142	0.128	0.154	0.046	88	104	116
554436	1/0	4	6.5	2703	0.102	0.122	0.044	100	120	136
556985	2/0	4	7.1	3407	0.081	0.097	0.043	116	140	156
602037	3/0	4	7.6	4295	0.064	0.078	0.042	132	160	180
554444	4/0	4	8.6	5416	0.051	0.062	0.041	156	184	208
602052	250	4	9.2	6400	0.043	0.053	0.041	172	204	232
675713	350	4	12.5	8960	0.031	0.039	0.040	208	248	280
644547	350	4	12.6	8960	0.031	0.039	0.040	208	248	280
602078	350	4	12.6	8960	0.031	0.039	0.040	208	248	280
TBA	350	4	12.8	8960	0.031	0.039	0.040	208	248	280
672237	500	4	14.3	12800	0.022	0.029	0.039	256	304	344
675711	500	4	14.3	12800	0.022	0.029	0.039	256	304	344
672235	500	4	14.3	12800	0.022	0.029	0.039	256	304	344
554469	500	4	14.3	12800	0.022	0.029	0.039	256	304	344
672240	500	4	15.1	12800	0.022	0.029	0.039	256	304	344
675706	600	4	16.3	15360	0.018	0.025	0.039	280	336	380
665772	600	4	17.1	15360	0.018	0.025	0.039	280	336	380
649649	600	4	17.2	15360	0.018	0.025	0.039	280	336	380
675708	600	4	17.4	15360	0.018	0.025	0.039	280	336	380
570961	750	4	17.8	19200	0.014	0.022	0.038	320	380	428

* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.
* Ampacities have been adjusted for more than Three Current-Carrying Conductors.