CU 600/1000V XLPE Insulation PVC Jacket XHHW-2 With Green Ground. 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 Green Insulated Ground. 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:** Green insulated class B compressed stranded bare copper per ASTM B3 and ASTM B8.
4. **Filler:** Paper filler as needed
5. **Binder:** Binder tape as needed
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. Type (TC-ER) per NEC 336.10. 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-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 383 Flame Test (70,000 btu)

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE® {UL} XXX AWG (XX.X{mm2}) CU 2/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

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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
671042	8	2	7	0.141	45	1 x 10	60	0.592	135	242
570959	6	2	7	0.177	45	1 x 8	60	0.691	215	341
596240^	4	2	7	0.225	45	1 x 8	60	0.748	311	444
TBA	2	2	7	0.282	45	1 x 6	80	0.906	494	714
TBA	1	2	19	0.322	55	1 x 6	80	1.026	602	875
TBA	1/0	2	19	0.361	55	1 x 6	80	1.104	738	1041
TBA	2/0	2	19	0.405	55	1 x 6	80	1.192	910	1248
TBA	3/0	2	19	0.456	55	1 x 4	80	1.294	1174	1553
TBA	4/0	2	19	0.512	55	1 x 4	80	1.406	1446	1872
TBA	250	2	37	0.558	65	1 x 4	80	1.538	1686	2190
TBA	350	2	37	0.661	65	1 x 3	110	1.804	2344	3052
TBA	500	2	37	0.789	65	1 x 2	110	2.060	3320	4175
TBA	600	2	61	0.865	80	1 x 2	110	2.272	3944	4971
TBA	750	2	61	0.968	80	1 x 1	110	2.478	4931	6095
TBA	1000	2	61	1.117	80	1 x 1/0	140	2.836	6557	8098

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

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
671042	8	2	2.4	264	0.653	0.786	0.052	40	50	55
570959	6	2	2.8	419	0.411	0.495	0.051	55	65	75
596240^	4	2	3.0	667	0.258	0.310	0.048	70	85	95
TBA	2	2	3.6	1061	0.162	0.195	0.045	95	115	130
TBA	1	2	5.1	1339	0.128	0.154	0.046	110	130	145
TBA	1/0	2	5.5	1689	0.102	0.122	0.044	125	150	170
TBA	2/0	2	6.0	2129	0.081	0.097	0.043	145	175	195
TBA	3/0	2	6.5	2684	0.064	0.078	0.042	165	200	225
TBA	4/0	2	7.0	3385	0.051	0.062	0.041	195	230	260
TBA	250	2	7.7	4000	0.043	0.053	0.041	215	255	290
TBA	350	2	9.0	5600	0.031	0.039	0.040	260	310	350
TBA	500	2	12.4	8000	0.022	0.029	0.039	320	380	430
TBA	600	2	13.6	9600	0.018	0.025	0.039	350	420	475
TBA	750	2	14.9	12000	0.014	0.022	0.038	400	475	535
TBA	1000	2	17.0	16000	0.011	0.018	0.037	455	545	615

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