



## **CU 600/1000V EPR Insulation LSZH-TP Jacket XHHW-2. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free**

Type TC-ER Power Cable 600 or 1000 Volt Four Conductor Copper, Ethylene Propylene Rubber (EPR) insulation XHHW-2 Thermoplastic SOLONON® Low Smoke Zero Halogen (LSZH-TP) Jacket with 1 Bare CU Ground. 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:** Ethylene Propylene Rubber (EPR) 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:** Thermoplastic SOLONON® Low Smoke Zero Halogen (LSZH-TP) Jacket

### **APPLICATIONS AND FEATURES:**

Southwire's 600 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
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (500kcmil & Larger)




**SAMPLE PRINT LEGEND:**

{SQFTG} SOUTHWIRE® {UL} XXX KCMIL CU 4 CDRS TYPE TC-ER XHHW-2 CDRS GW 1 X X AWG CU SOLONON® 90°C JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600 VOLTS

**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	
673535	2	4	7	0.282	45	1 x 6	80	1.078	909	1234	Black
TBA	1	4	19	0.322	55	1 x 6	80	1.207	1123	1437	Black
TBA	1/0	4	19	0.361	55	1 x 6	80	1.302	1395	1738	Black
TBA	4/0	4	19	0.512	55	1 x 4	110	1.727	2764	3320	Black
TBA	250	4	37	0.558	65	1 x 4	110	1.887	3244	3896	Black
673550	350	4	37	0.661	65	1 x 3	110	2.187	4530	5552	Black
TBA	500	4	37	0.789	65	1 x 2	110	2.446	6436	7307	Black

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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.

**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
673535	2	4	5.4	1698	0.162	0.195	0.045	92	104
TBA	1	4	6.0	2142	0.128	0.154	0.046	104	116
TBA	1/0	4	6.5	2703	0.102	0.122	0.044	120	136
TBA	4/0	4	8.6	5416	0.051	0.062	0.041	184	208
TBA	250	4	9.4	6400	0.043	0.053	0.041	204	232
673550	350	4	13.1	8960	0.031	0.039	0.040	248	280
TBA	500	4	14.7	12800	0.022	0.029	0.039	304	344

\* 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.

