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

Type TC-ER Power Cable 600Volt 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)

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

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
673535	2	4	5.4	1698	0.162	0.195	0.045	76	92	104
TBA	1	4	6.0	2142	0.128	0.154	0.046	88	104	116
TBA	1/0	4	6.5	2703	0.102	0.122	0.044	100	120	136
TBA	4/0	4	8.6	5416	0.051	0.062	0.041	156	184	208
TBA	250	4	9.4	6400	0.043	0.053	0.041	172	204	232
673550	350	4	13.1	8960	0.031	0.039	0.040	208	248	280
TBA	500	4	14.7	12800	0.022	0.029	0.039	256	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.