



## **Flexible 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 Flexible 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:**

- Conductor:** Sizes 8 - 4/0 AWG: Class K, flexible stranded bare copper per ASTM B3 and B172. Sizes 250 - 750 kcmil: Class I, flexible stranded bare copper per ASTM B3 and B172.
- Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- Grounding Conductor:** Sizes 8 - 4/0 AWG: Class K, flexible stranded bare copper per ASTM B3 and B172. Sizes 250 - 750 kcmil: Class I, flexible stranded bare copper per ASTM B3 and B172. When present, phase cable conductor sizes 8 & 6 AWG have an insulated green ground.
- Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
- Binder:** Polyester flat thread binder tape for cable sizes larger than 2 AWG
- Overall Jacket:** Polyvinyl Chloride (PVC)

### **APPLICATIONS AND FEATURES:**

Southwire's 600 or 1000 Volt Type TC-ER flexible 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 B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-58-679 Cable Conductor Identification Method 3 (1-BLACK, 2-RED, 3-BLUE)
- IEEE 383 Flame Test (70,000 btu)
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test





**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 FT4 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 FT4 SR 600V 90C

**Table 1 – Weights and Measurements**

| 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      |              |
| 350        | 3            | 855            | 0.670                   | 65               | 1 x 3     | 110              | 1.956      | 3381          | 4190           | Black        |

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.

**Table 2 – Electrical and Engineering Data**

| 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                        |
| 350        | 3            | 9.7                | 8400             | 0.032                | 0.042                | 0.040                      | 310                        | 350                        |

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

