# AL 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 Three Conductor Aluminum, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Polyvinyl Chloride (PVC) Jacket with 1 Bare AL Ground. Silicone Free

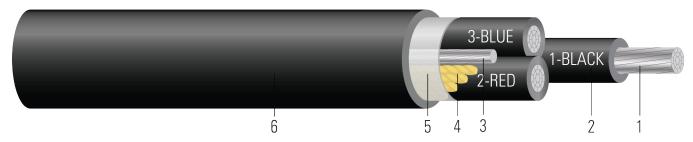


Image not to scale. See Table 1 for dimensions.

#### **CONSTRUCTION:**

- 1. **Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- 2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- 3. **Grounding Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- 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:** Sunlight resistant 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. Silicone free.

#### **SPECIFICATIONS:**

- ASTM B800 8000 Series Aluminum Alloy Wire
- ASTM B836 Compact Rounded Stranded Aluminum 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-58-679 Control Cable Conductor Identification Method 4
- 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

#### **SAMPLE PRINT LEGEND:**

SOUTHWIRE® {UL} XXX AWG AL 3/C TYPE TC-ER XHHW-2 CDRS GW 1 X X AWG AL 90°C JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V or 1000V {YYYY} PC09-FLRBLGN {SEQUENTIAL FOOTAGE MARKS} SEQ FEET







**SPEC 45264** Stock #: TBA

## **Table 1 – Weights and Measurements**

Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Jacket Thickness	Approx. OD	Aluminum Weight	Approx. Weight
AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	mil	inch	lb/1000ft	lb/1000ft
2	3	7	0.268	45	1 x 6	80	0.935	213	449

All dimensions are nominal and subject to normal manufacturing tolerances

### **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 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
2	3	3.7	1194	0.267	0.321	0.045	75	90	100

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

## Method 4 Color Code. (1-ONE, 2-TWO, 3-THREE)

Stock Code	Size
671633	4
670971	2
670963	1/0







<sup>♦</sup> Cable marked with this symbol is a standard stock item

<sup>\*</sup> Strand count meets minimum number per ASTM