**SPEC 45003** Stock #: 890109

# CU 600V XLPE Insulation RHH/RHW-2/USE-2. CT Rated - Sunlight **Resistant - For Direct Burial - Silicone Free**

Power Cable 600Volt Single Conductor Copper, Cross Linked Polyethylene (XLPE) insulation RHH/RHW-2/USE-2. CT Rated 1/0 and Larger - Sunlight Resistant - Silicone Free

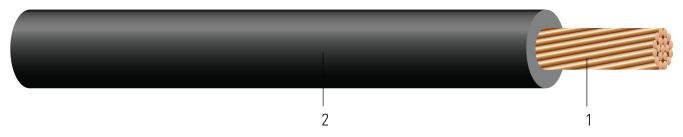


Image not to scale. See Table 1 for dimensions.

### **CONSTRUCTION:**

- 1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- 2. **Insulation:** Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 USE-2 Silicone-Free

#### **APPLICATIONS AND FEATURES:**

Southwire's 600 Volt 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. CT Rated 1/0 and Larger - Sunlight Resistant - Silicone Free. Rated for 1000 lbs./FT maximum sidewall pressure.

#### **SPECIFICATIONS:**

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- CT USE Sizes 1/0 AWG and Larger
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test (1/0 and Larger)
- VW-1 (Vertical-Wire) Flame Test
- PR I/II Oil Resistant
- -40°C Rated

#### SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE E32071 {UL} XXX AWG (XX.X{mm2}) CU TYPE USE-2 OR RHH OR RHW-2 XX MILS XLP FOR CT USE SUN. RES. VW-1 600 VOLTS {NOM}-ANCE RHH/RHW-2 600V 90C









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

Stock Number	Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/Kcmil		No. of Strands	inch	mil	inch	lb/1000ft	lb/1000ft
890109◊	500	1	37	0.789	95	0.966	1543	1707

All dimensions are nominal and subject to normal manufacturing tolerances

## **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
890109◊	500	1	3.8	4000	0.022	0.029	0.039	320	380	430

<sup>\*</sup> Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.









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

<sup>\*</sup> Inductive Reactance is based on non-ferrous conduit with one diameter spacing.