**SPEC 45311** Stock #: TBA

# AL 600/1000V XLPE Insulation AIA PVC Jacket XHHW-2. CT Rated -**Sunlight Resistant - For Direct Burial - Silicone Free**

Type MC Power Cable 600Volt Three Conductor Aluminum, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket with 1 Bare AL Ground, Silicone Free.

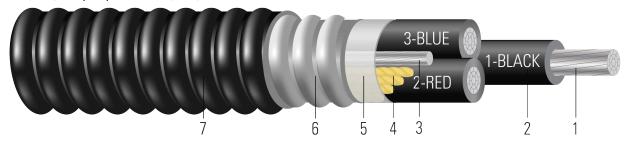


Image not to scale. See Table 1 for dimensions.

#### **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:** Polypropylene tape
- 6. Armor: Aluminum Interlocked Armor (AIA)
- 7. Overall Jacket: Polyvinyl Chloride (PVC) Jacket

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

Southwire's 600 Volt Type MC 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. Silicone Free.

#### **SPECIFICATIONS:**

- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1569 Metal-Clad 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

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

{SQFTG\_DUAL} SOUTHWIRE {UL} E96627 3/C XXX KCMIL COMPACT AL.--- {ALUMAFLEX}® AA8176 XX MILS XLP 600 VOLTS GW 1 X X AWG 3E AL TYPE MC FOR CT USE SUN. RES. DIRECT BURIAL 90°C USA







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

Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD	Aluminum Weight	Approx. Weight
AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
1/0	3	19	0.336	55	1 x 4	1.175	50	1.275	490	766

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	Capacitive Reactance @ 60Hz	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	MΩ*1000ft	Ω/1000ft	Amp	Amp
1/0	3	8.9	1900	0.168	0.201	0.019	0.044	120	135

<sup>\*</sup> Ampacities based upon 2023 NEC Table 310.16. 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> Strand count meets minimum number per ASTM