Stock #: 601377 SPEC 45301

# 3/C CU 600V XLPE XHHW-2 AIA PVC Power Cable With Ground. Silicone Free.

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

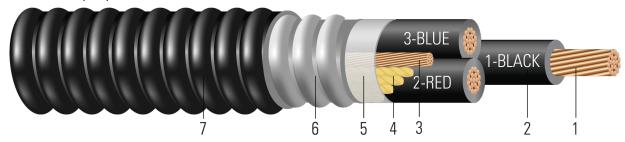


Image not to scale. See Table 1 for dimensions.

#### **CONSTRUCTION:**

- 1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- 2. Insulation: Cross Linked Polyethylene (XLPE) Type XHHW-2
- 3. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- 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. Constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10. Silicone Free.

## **SPECIFICATIONS:**

- ASTM B3 Standard Specification for Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1309 Marine Shipboard Cable
- UL 1569 Metal-Clad Cables
- UL 1685 FT4 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
- IEEE 1202 FT4 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 (210,000 Btu/hr)
- ABS Listed as CWCMC









**SPEC 45301** Stock #: 601377

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

{SQFTG\_DUAL} SOUTHWIRE MASTER-DESIGN {UL} 3/C (1 AWG) XX.Xmm2 CU XX MILS XLP 600 VOLTS GW 1 X X AWG CU TYPE MC FOR CT USE SUN. RES. DIRECT BURIAL 90{D}C USA -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

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

Stock Number	Cond. Size	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Ground	Diameter Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/ Kcmil	inch	mil	inch	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
601377	250	0.558	65	0.688	1 x 4	1.696	60	1.816	2469	3240

All dimensions are nominal and subject to normal manufacturing tolerances

# Table 2 – Electrical and Engineering Data

ı	Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Shield Short Circuit Current 6 Cycles	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	Amp
	601377	250	12.7	6000	0.043	0.055	0.027	56845	215	255	290

<sup>†</sup> Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)







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