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

Type MC Power Cable 600Volt Four 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. Silicone Free.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper 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, 4-ORANGE)
- 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} 4/C (XX 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°C USA -- {NOM}-ANCE Tipo MC XHHW-2 CT





SPEC 45307

Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Cond. Number | Strand Count | Diameter Over Conductor | Insul. Thickness | Ground | Dia. Over Armor | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight |
|-----------------|---------------|-----------------|-------------------|----------------------------|---------------------|--------------|--------------------|---------------------|---------------|------------------|-------------------|
| | AWG/ Kcmil | | No. of Strands | inch | mil | No. x AWG | inch | mil | inch | lb/1000ft | lb/1000ft |
| 890229 | 1/0 | 4 | 19 | 0.361 | 55 | 1 x 6 | 1.352 | 50 | 1.452 | 1399 | 1907 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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 | 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 |
| 890229 | 1/0 | 4 | 10.2 | 2703 | 0.102 | 0.122 | 0.017 | 0.044 | 120 | 136 |

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

* Ampacities have been adjusted for more than Three Current-Carrying Conductors.



