



CU 600/1000V XLPE Insulation 50% Ground AIA PVC Jacket XHHW-2. CT Rated -Sunlight Resistant - For Direct Burial - Silicone Free

Type MC Power Cable 600Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Three Bare CU 50% Ground Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket with. Silicone Free.

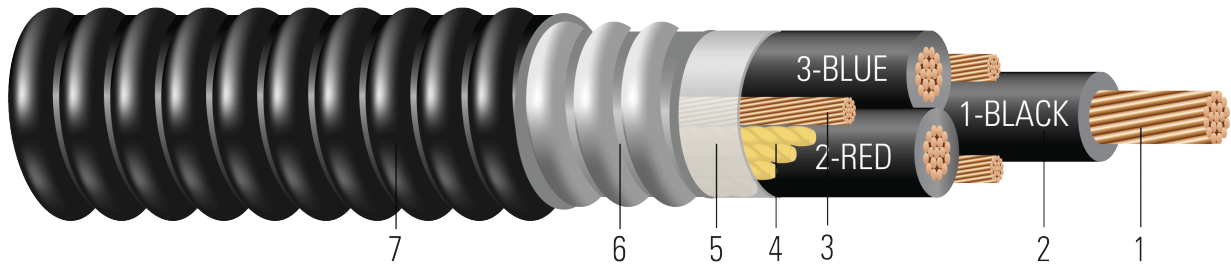


Image not to scale. See Table 1 for dimensions.

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:** Three separate Ground Wires with a combined circular mil of 50% of the phase conductor. Stranded class B compressed 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. The ground is sized to 50% of the phase conductor with three separate bare grounds one in each interstecie between conductors. 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 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 Flame Test (70,000) BTU/hr Vertical Tray Test





SAMPLE PRINT LEGEND:

SQFTG_DUAL} SOUTHWIRE {UL} 3/C (XXX KCMIL) XXXmm² CU XX MILS XLP 600 VOLTS GW 3 X 1 AWG CU TYPE MC FOR CT USE SUN. RES. DIRECT BURIAL 90°C USA -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

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 |
| 655383 | 1/0 | 3 | 19 | 0.361 | 55 | 3 x 6 | 1.246 | 50 | 1.352 | 1233 | 1677 |
| 665396 | 2/0 | 3 | 19 | 0.405 | 55 | 3 x 6 | 1.354 | 50 | 1.460 | 1490 | 1983 |
| 655386 | 3/0 | 3 | 19 | 0.456 | 55 | 3 x 4 | 1.449 | 50 | 1.555 | 1960 | 2524 |
| TBA | 4/0 | 3 | 19 | 0.512 | 55 | 3 x 4 | 1.656 | 60 | 1.776 | 2105 | 2800 |
| 671883 | 250 | 3 | 37 | 0.558 | 65 | 3 x 4 | 1.769 | 60 | 1.889 | 2729 | 3597 |
| TBA | 250 | 3 | 37 | 0.558 | 65 | 3 x 2 | 1.798 | 60 | 1.918 | 2465 | 3269 |
| TBA | 300 | 3 | 37 | 0.61 | 65 | 3 x 2 | 1.910 | 60 | 2.030 | 2966 | 3934 |
| 576888 | 350 | 3 | 37 | 0.661 | 65 | 3 x 2 | 1.983 | 60 | 2.103 | 3895 | 4780 |
| 552598 | 500 | 3 | 37 | 0.789 | 65 | 3 x 1 | 2.275 | 75 | 2.425 | 5460 | 6629 |
| TBA | 600 | 3 | 61 | 0.865 | 80 | 3 x 1/0 | 2.526 | 75 | 2.676 | 5814 | 7361 |
| 588666 | 750 | 3 | 61 | 0.968 | 80 | 3 x 2/0 | 2.758 | 75 | 2.908 | 8261 | 9751 |

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 |
| 655383 | 1/0 | 3 | 9.5 | 2534 | 0.102 | 0.122 | 0.017 | 0.044 | 150 | 170 |
| 665396 | 2/0 | 3 | 10.2 | 3194 | 0.081 | 0.097 | 0.016 | 0.043 | 175 | 195 |
| 655386 | 3/0 | 3 | 10.9 | 4027 | 0.064 | 0.078 | 0.014 | 0.042 | 200 | 225 |
| TBA | 4/0 | 3 | 12.4 | 5078 | 0.051 | 0.062 | 0.013 | 0.041 | 230 | 260 |
| 671883 | 250 | 3 | 13.2 | 6000 | 0.043 | 0.053 | 0.014 | 0.041 | 255 | 290 |
| TBA | 250 | 3 | 13.4 | 6000 | 0.043 | 0.053 | 0.014 | 0.041 | 255 | 290 |
| TBA | 300 | 3 | 14.2 | 7200 | 0.036 | 0.045 | 0.013 | 0.041 | 285 | 320 |
| 576888 | 350 | 3 | 14.7 | 8400 | 0.031 | 0.039 | 0.012 | 0.040 | 310 | 350 |
| 552598 | 500 | 3 | 17.0 | 12000 | 0.022 | 0.029 | 0.010 | 0.039 | 380 | 430 |
| TBA | 600 | 3 | 18.7 | 14400 | 0.018 | 0.025 | 0.011 | 0.039 | 420 | 475 |
| 588666 | 750 | 3 | 20.4 | 18000 | 0.014 | 0.022 | 0.010 | 0.038 | 475 | 535 |

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

