

## 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.

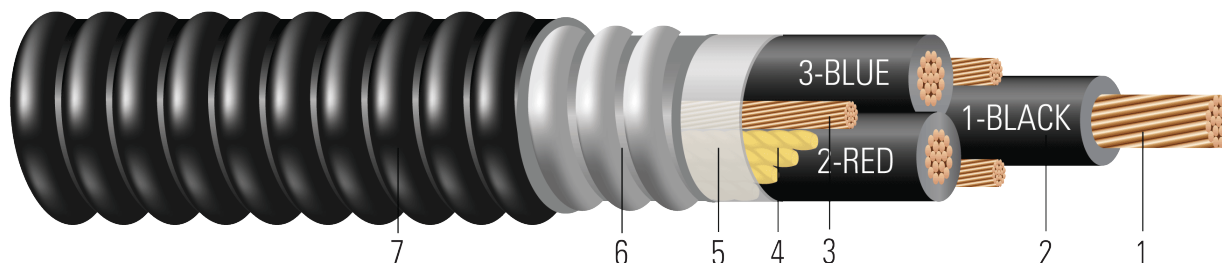


Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- 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
- Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
- Binder:** Polypropylene tape
- Armor:** Aluminum Interlocked Armor (AIA)
- 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



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## 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.

