



AL 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 Aluminum, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Three Bare AL 50% Ground Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket with. Silicone Free.

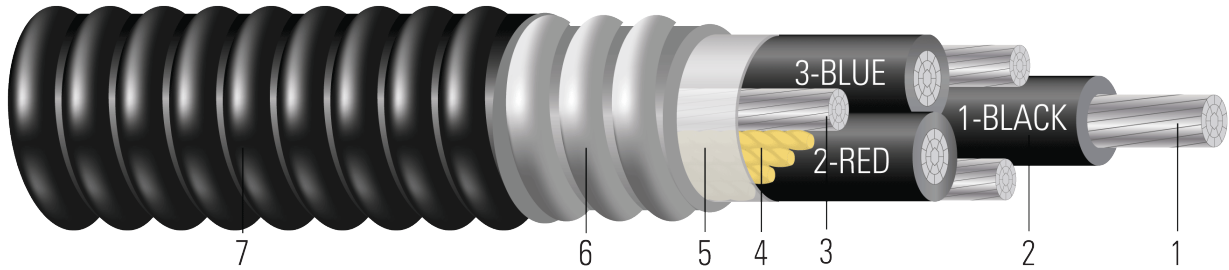


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- 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. Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- Filler:** Paper filler or 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 condutors. 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 3 X XX AWG 3E AL TYPE MC FOR CT USE SUN. RES. DIRECT BURIAL 90°C USA





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 | Aluminum Weight | Approx. Weight |
|--------------|---------------|--------------|----------------|-------------------------|------------------|-----------|-----------------|------------------|------------|-----------------|----------------|
| | AWG/ Kcmil | | No. of Strands | inch | mil | No. x AWG | inch | mil | inch | lb/1000ft | lb/1000ft |
| TBA | 1/0 | 3 | 19 | 0.336 | 55 | 3 x 6 | 1.175 | 50 | 1.275 | 490 | 766 |
| TBA | 2/0 | 3 | 19 | 0.376 | 55 | 3 x 6 | 1.262 | 50 | 1.362 | 581 | 886 |
| TBA | 3/0 | 3 | 19 | 0.422 | 55 | 3 x 4 | 1.361 | 50 | 1.461 | 697 | 1036 |
| TBA | 4/0 | 3 | 19 | 0.474 | 55 | 3 x 4 | 1.573 | 60 | 1.693 | 861 | 1283 |
| TBA | 250 | 3 | 35 | 0.52 | 65 | 3 x 2 | 1.716 | 60 | 1.836 | 1025 | 1527 |
| TBA | 300 | 3 | 35 | 0.569 | 65 | 3 x 2 | 1.822 | 60 | 1.942 | 1277 | 1822 |
| 649332 | 350 | 3 | 35 | 0.615 | 65 | 3 x 2 | 1.929 | 65 | 2.061 | 1483 | 2081 |
| 677353 | 600 | 3 | 41 | 0.812 | 80 | 3 x 1/0 | 2.402 | 80 | 2.568 | 2386 | 3954 |
| 576220 | 750 | 3 | 58 | 0.908 | 80 | 3 x 2/0 | 2.624 | 80 | 2.790 | 2930 | 4071 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Strand count meets minimum number per ASTM

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 |
| TBA | 1/0 | 3 | 8.9 | 1900 | 0.168 | 0.201 | 0.019 | 0.044 | 120 | 135 |
| TBA | 2/0 | 3 | 9.5 | 2395 | 0.133 | 0.160 | 0.017 | 0.043 | 135 | 150 |
| TBA | 3/0 | 3 | 10.2 | 3020 | 0.105 | 0.126 | 0.015 | 0.042 | 155 | 175 |
| TBA | 4/0 | 3 | 11.9 | 3808 | 0.084 | 0.100 | 0.014 | 0.041 | 180 | 205 |
| TBA | 250 | 3 | 12.9 | 4500 | 0.071 | 0.086 | 0.015 | 0.041 | 205 | 230 |
| TBA | 300 | 3 | 13.6 | 5400 | 0.059 | 0.071 | 0.013 | 0.041 | 230 | 260 |
| 649332 | 350 | 3 | 14.4 | 6300 | 0.050 | 0.062 | 0.012 | 0.040 | 250 | 280 |
| 677353 | 600 | 3 | 18.0 | 10800 | 0.029 | 0.037 | 0.012 | 0.039 | 340 | 385 |
| 576220 | 750 | 3 | 19.5 | 13500 | 0.024 | 0.031 | 0.011 | 0.038 | 385 | 435 |

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

