AL 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 Aluminum, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Aluminum

Type MC Power Cable 600Volt Four Conductor Aluminum, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket with 3 Bare AL Ground. Silicone Free.



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- 1. **Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- 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 condutor. Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- 4. **Filler:** Paper filler or 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 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 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- 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} SOUTHWIRE {UL} 4/C 750 KCMIL COMPACT 8000 AL. --- TRIPLE E ALLOY AA8176 XHHW CDRS 600 VOLTS GW 3 X 2/O AWG 3E AL TYPE MC EZ-JKT FOR CT USE SUN. RES. DIRECT BURIAL 90°C

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 | Jacket Color |
|-----------------|---------------|-----------------|-------------------|----------------------------|---------------------|--------------|--------------------|---------------------|---------------|--------------------|-------------------|-----------------|
| | AWG/ Kcmil | | No. of Strands | inch | mil | No. x AWG | inch | mil | inch | lb/1000ft | lb/1000ft | |
| TBA | 1/0 | 4 | 19 | 0.336 | 55 | 3 x 6 | 1.291 | 50 | 1.391 | 609 | 883 | Black |
| TBA | 2/0 | 4 | 19 | 0.376 | 55 | 3 x 6 | 1.388 | 50 | 1.488 | 727 | 1024 | Black |
| TBA | 3/0 | 4 | 19 | 0.422 | 55 | 3 x 4 | 1.599 | 60 | 1.719 | 877 | 1246 | Black |
| TBA | 4/0 | 4 | 19 | 0.474 | 55 | 3 x 4 | 1.725 | 60 | 1.845 | 1119 | 1521 | Black |
| TBA | 250 | 4 | 37 | 0.52 | 65 | 3 x 2 | 1.885 | 60 | 2.005 | 1387 | 1867 | Black |
| TBA | 300 | 4 | 37 | 0.569 | 65 | 3 x 2 | 2.004 | 60 | 2.124 | 1606 | 2121 | Black |
| TBA | 350 | 4 | 37 | 0.615 | 65 | 3 x 2 | 2.115 | 60 | 2.235 | 1821 | 2368 | Black |
| TBA | 500 | 4 | 37 | 0.735 | 65 | 3 x 1 | 2.405 | 75 | 2.555 | 2480 | 3188 | Black |
| TBA | 600 | 4 | 61 | 0.812 | 80 | 3 x 1/0 | 2.664 | 75 | 2.814 | 2922 | 3795 | Black |
| 587658◊ | 750 | 4 | 58 | 0.908 | 80 | 3 x 2/0 | 2.896 | 80 | 3.062 | 3688 | 4896 | Black |

All dimensions are nominal and subject to normal manufacturing tolerances

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 | 4 | 9.7 | 2027 | 0.168 | 0.201 | 0.019 | 0.044 | 96 | 108 |
| TBA | 2/0 | 4 | 10.4 | 2555 | 0.133 | 0.160 | 0.017 | 0.043 | 108 | 120 |
| TBA | 3/0 | 4 | 12.0 | 3221 | 0.105 | 0.126 | 0.015 | 0.042 | 124 | 140 |
| TBA | 4/0 | 4 | 12.9 | 4062 | 0.084 | 0.100 | 0.014 | 0.041 | 144 | 164 |
| TBA | 250 | 4 | 14.0 | 4800 | 0.071 | 0.086 | 0.015 | 0.041 | 164 | 184 |
| TBA | 300 | 4 | 14.9 | 5760 | 0.059 | 0.071 | 0.013 | 0.041 | 184 | 208 |
| TBA | 350 | 4 | 15.6 | 6720 | 0.050 | 0.062 | 0.012 | 0.040 | 200 | 224 |
| TBA | 500 | 4 | 17.9 | 9600 | 0.035 | 0.044 | 0.010 | 0.039 | 248 | 280 |
| TBA | 600 | 4 | 19.7 | 11520 | 0.029 | 0.037 | 0.012 | 0.039 | 272 | 308 |
| 587658◊ | 750 | 4 | 21.4 | 14400 | 0.024 | 0.031 | 0.011 | 0.038 | 308 | 348 |

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





[♦] Cable marked with this symbol is a standard stock item

^{*} Strand count meets minimum number per ASTM

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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