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.

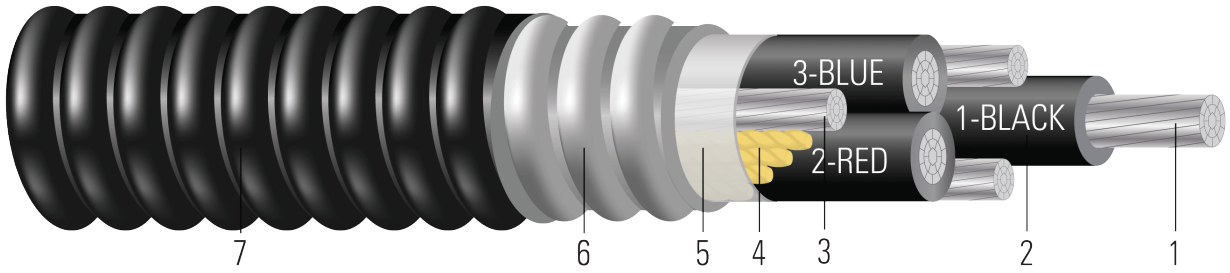


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

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 op- erating 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

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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.