

AL 600/1000V XLPE Insulation AIA PVC Jacket. XHHW-2 Silicone Free

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.

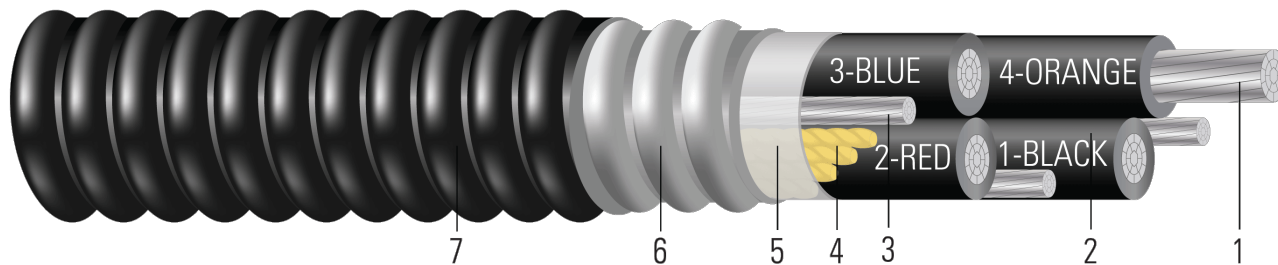


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- 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 4. 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 conductors. 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 MASTER-DESIGN {UL} 4/C 750 KCMIL COMPACT 8000 AL. --- TRIPLE E ALLOY AA8176 XHHW CDRS 600 VOLTS GW 3 X 2/0 AWG 3E AL TYPE MC EZ-JKT FOR CT USE SUN. RES. DIRECT BURIAL 90{D}C



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Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Dia. Over Insulation	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD	Aluminum Weight	Approx. Weight
	AWG/Kcmil		No. of Strands	inch	mil	inch	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
TBA	1/0	4	19	0.336	55	0.446	3 x 6	1.301	50	1.401	617	890
TBA	2/0	4	19	0.376	55	0.486	3 x 6	1.398	50	1.498	735	1033
TBA	3/0	4	19	0.422	55	0.532	3 x 4	1.609	60	1.729	885	1254
TBA	4/0	4	19	0.474	55	0.584	3 x 4	1.735	60	1.855	1132	1535
TBA	250	4	37	0.520	65	0.650	3 x 2	1.895	60	2.015	1306	1785
TBA	300	4	37	0.569	65	0.699	3 x 2	2.013	60	2.133	1517	2031
TBA	350	4	37	0.615	65	0.745	3 x 2	2.124	60	2.244	1726	2274
TBA	500	4	37	0.735	65	0.865	3 x 1	2.415	75	2.565	2370	3079
TBA	600	4	61	0.812	80	0.972	3 x 1/0	2.674	75	2.824	2797	3671
587658◇	750	4	58	0.908	80	1.068	3 x 2/0	2.896	80	3.062	3688	4896

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	Inductive Reactance @ 60Hz	Allowable Ampacity At 60°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
TBA	1/0	4	9.8	2028	0.168	0.201	0.044	80	96	108
TBA	2/0	4	10.4	2556	0.133	0.160	0.043	92	108	120
TBA	3/0	4	12.1	3222	0.105	0.126	0.042	104	124	140
TBA	4/0	4	12.9	4063	0.084	0.100	0.041	120	144	164
TBA	250	4	14.1	4800	0.071	0.086	0.041	136	164	184
TBA	300	4	14.9	5760	0.059	0.071	0.041	156	184	208
TBA	350	4	15.7	6720	0.050	0.062	0.040	168	200	224
TBA	500	4	17.9	9600	0.035	0.044	0.039	208	248	280
TBA	600	4	19.7	10000	0.029	0.037	0.039	228	272	308
587658◇	750	4	21.4	10000	0.024	0.031	0.038	256	308	348

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

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

