

3/C AL 600V XLPE XHHW-2 AIA PVC Power Cable With Ground. Silicone Free

Type MC Power Cable 600Volt Three Conductor Aluminum, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket with 1 Bare AL Ground. Silicone Free.

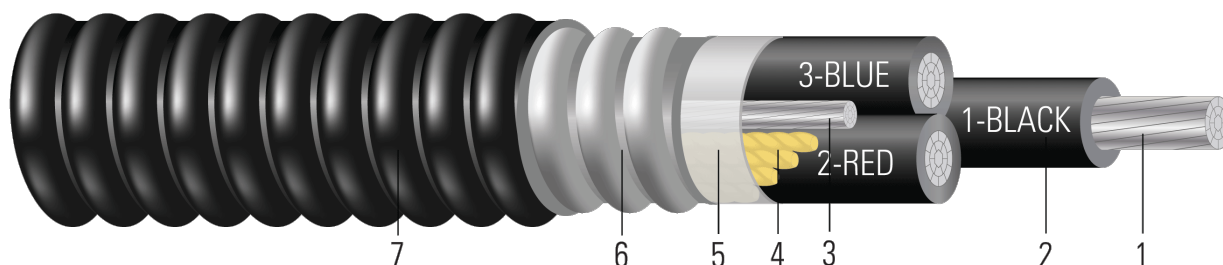


Image not to scale. See Table 1 for dimensions.

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:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- 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. Constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10. Silicone Free.

SPECIFICATIONS:

- ASTM B800 8000 Series Aluminum Alloy Wire
- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1309 Marine Shipboard Cable
- 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 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 - (210,000 Btu/hr)
- ABS Listed as CWC/MC



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SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE MASTER-DESIGN {UL} 4/C (XXX KCMILXXXmm² CU 65 MILS XLP 600 VOLTS GW 3 X 1 AWG CU TYPE MC FOR CT USE SUN. RES. DIRECT BURIAL 90{D}C USA -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Ground	Diameter Over Armor	Jacket Thickness	Approx. OD	Aluminum Weight	Approx. Weight
	AWG/ Kcmil	inch	mil	inch	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
TBA	8	0.134	45	0.224	1 x 8	0.694	50	0.794	145	272
TBA	6	0.169	45	0.259	1 x 8	0.769	50	0.869	183	330
TBA	4	0.213	45	0.303	1 x 6	0.864	50	0.964	248	422
TBA	2	0.268	45	0.358	1 x 6	0.983	50	1.083	334	543
TBA	1	0.299	55	0.409	1 x 4	1.093	50	1.193	412	671
TBA	1/0	0.336	55	0.446	1 x 4	1.173	50	1.273	485	771
TBA	2/0	0.376	55	0.486	1 x 4	1.260	50	1.360	574	891
TBA	3/0	0.423	55	0.533	1 x 4	1.361	50	1.461	687	1041
TBA	4/0	0.475	55	0.585	1 x 2	1.474	50	1.574	849	1245
TBA	250	0.520	65	0.650	1 x 2	1.614	60	1.734	977	1488
TBA	300	0.570	65	0.700	1 x 2	1.722	60	1.842	1133	1694
TBA	350	0.616	65	0.746	1 x 2	1.921	60	2.041	1367	1985
TBA	500	0.736	65	0.866	1 x 1	2.181	60	2.301	1857	2601
TBA	600	0.813	80	0.973	1 x 1	2.412	75	2.562	2180	3181
TBA	750	0.908	80	1.068	1 x 1/0	2.617	75	2.767	2662	3788

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	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Shield Short Circuit Current 6 Cycles	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	Amp
TBA	8	5.6	297	1.070	1.345	0.034	3785	35	40	45
TBA	6	6.1	472	0.675	0.848	0.032	6016	40	50	55
TBA	4	6.8	751	0.424	0.533	0.030	9569	55	65	75
TBA	2	7.6	1194	0.266	0.334	0.028	15213	75	90	100
TBA	1	8.4	1506	0.211	0.265	0.029	19186	85	100	115
TBA	1/0	8.9	1901	0.168	0.211	0.028	24209	100	120	135
TBA	2/0	9.5	2396	0.133	0.167	0.028	30513	115	135	150
TBA	3/0	10.2	3020	0.105	0.132	0.027	38468	130	155	175
TBA	4/0	11.0	3809	0.084	0.105	0.026	48509	150	180	205
TBA	250	12.1	4500	0.071	0.089	0.027	57313	170	205	230
TBA	300	12.9	5400	0.059	0.075	0.026	68775	195	230	260
TBA	350	14.3	6300	0.051	0.064	0.026	80238	210	250	280
TBA	500	16.1	9000	0.035	0.045	0.025	114625	260	310	350
TBA	600	17.9	10800	0.030	0.038	0.026	137550	285	340	385
TBA	750	19.4	13500	0.024	0.031	0.025	171938	320	385	435

† Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

