

## 3/C AL 600V XLPE XHHW-2 AIA PVC Power Cable With 50% Ground. 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.

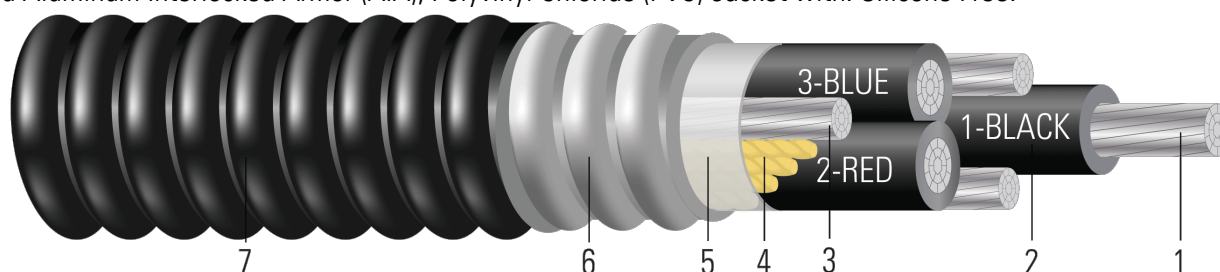


Image not to scale. See Table 1 for dimensions.

### 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 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 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 MASTER-DESIGN {UL} E96627 3/C XXX KCMIL COMPACT AL.--- {ALUMAFLEX}{R} AA8176 XX MILS XLP 600 VOLTS GW 1 X XXX KCMIL 3E AL TYPE MC FOR CT USE SUN. RES. DIRECT BURIAL 90{D}C USA



**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	1/0	0.336	55	0.446	3 x 6	1.173	50	1.273	520	806
TBA	2/0	0.376	55	0.486	3 x 6	1.260	50	1.360	609	926
TBA	3/0	0.423	55	0.533	3 x 4	1.361	50	1.461	767	1120
TBA	4/0	0.475	55	0.585	3 x 4	1.474	50	1.574	905	1301
TBA	250	0.520	65	0.650	3 x 2	1.614	60	1.734	1103	1615
TBA	300	0.570	65	0.700	3 x 2	1.722	60	1.842	1259	1820
649332	350	0.616	65	0.746	3 x 2	1.921	60	2.041	1494	2112
646658	500	0.736	65	0.866	1 x 250	2.181	60	2.301	2016	2760
677353	600	0.805	80	0.965	3 x 1/0	2.402	80	2.568	2387	3937
576220	750	0.908	80	1.068	3 x 2/0	2.617	75	2.767	2940	4066

All dimensions are nominal and subject to normal manufacturing tolerances

∅ Cable marked with this symbol is a standard stock item

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F). Ampacities have been adjusted for more than three current-carrying conductors based on Table 310.15(C) 1.

**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	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	8.9	1901	0.168	0.211	0.028	101	120	135
TBA	2/0	9.5	2396	0.133	0.167	0.028	112	134	150
TBA	3/0	10.2	3020	0.105	0.132	0.027	131	156	175
TBA	4/0	11.0	3809	0.084	0.105	0.026	153	183	205
TBA	250	12.1	4500	0.071	0.089	0.027	172	205	230
TBA	300	12.9	5400	0.059	0.075	0.026	195	232	260
649332	350	14.3	6300	0.051	0.064	0.026	210	250	280
646658	500	16.1	9000	0.035	0.045	0.025	262	313	350
677353	600	18.0	10800	0.030	0.038	0.026	285	340	385
576220	750	19.4	13500	0.024	0.031	0.025	326	389	435

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F). Ampacities have been adjusted for more than three current-carrying conductors based on Table 310.15(C) 1.

