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

- 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 4. 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. Constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10. 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 B800 8000 Series Aluminum Alloy Wire
- 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} SOUTHWIRE MASTER-DESIGN {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{D}C









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	1.287	50	1.387	635	976
TBA	2/0	0.376	55	0.486	3 x 6	1.383	50	1.483	751	1128
TBA	3/0	0.423	55	0.533	3 x 4	1.497	50	1.597	944	1365
TBA	4/0	0.475	55	0.585	3 x 4	1.622	60	1.742	1126	1629
TBA	250	0.520	65	0.650	3 x 2	1.879	60	1.999	1439	2060
TBA	300	0.570	65	0.700	3 x 2	2.000	60	2.120	1649	2328
TBA	350	0.616	65	0.746	3 x 2	2.111	60	2.231	1857	2591
TBA	500	0.736	65	0.866	3 x 1	2.401	75	2.551	2528	3481
TBA	600	0.813	80	0.973	3 x 1/0	2.659	75	2.809	3013	4202
587658◊	750	0.908	80	1.068	3 x 2/0	2.888	75	3.038	3698	5035

All dimensions are nominal and subject to normal manufacturing tolerances

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	1/0	9.7	2534	0.168	0.211	0.031	24209	80	96	108
TBA	2/0	10.4	3194	0.133	0.167	0.031	30513	92	108	120
TBA	3/0	11.2	4027	0.105	0.132	0.030	38468	104	124	140
TBA	4/0	12.2	5078	0.084	0.105	0.030	48509	120	144	164
TBA	250	14.0	6000	0.071	0.089	0.030	57313	136	164	184
TBA	300	14.8	7200	0.059	0.074	0.030	68775	156	184	208
TBA	350	15.6	8400	0.051	0.064	0.029	80238	168	200	224
TBA	500	17.9	12000	0.035	0.045	0.029	114625	208	248	280
TBA	600	19.7	14400	0.030	0.037	0.029	137550	228	272	308
587658◊	750	21.3	18000	0.024	0.030	0.029	171938	256	308	348

[†] 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)









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