CU 600/1000V XLPE Insulation AIA PVC Jacket XHHW-2. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

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

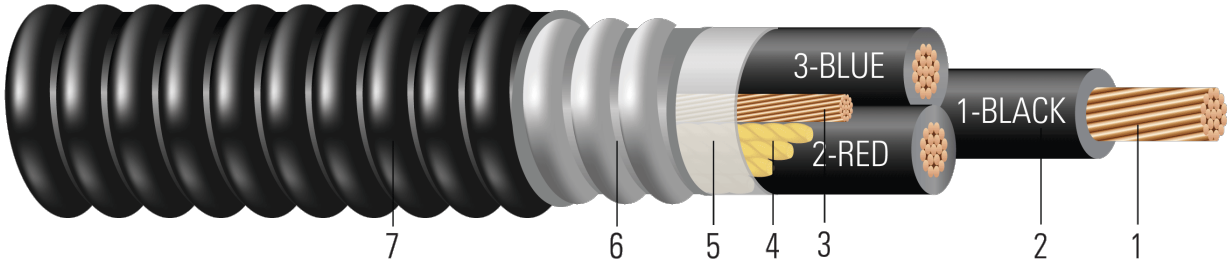

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
3. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
4. **Filler:** Paper filler (cable size 8 & 6 uses 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 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. Silicone Free.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-58-679 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)

SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE {UL} 3/C (1 AWG) XX.Xmm2 CU XX MILS XLP 600 VOLTS GW 1 X X AWG CU TYPE MC FOR CT USE SUN. RES. DIRECT BURIAL 90°C USA -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

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	Copper Weight	Approx. Weight	Jacket Color
	AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft	
606939	8	3	7	0.141	45	1 x 10	0.721	50	0.821	186	404	Black
606947	6	3	7	0.177	45	1 x 8	0.788	50	0.888	297	545	Black
606954◊	4	3	7	0.225	45	1 x 8	0.898	50	0.998	441	713	Black
671892	3	3	7	0.252	45	1 x 6	0.945	50	1.045	574	891	Black
560466◊	2	3	7	0.282	45	1 x 6	1.019	50	1.119	702	1046	Black
550801	1	3	19	0.322	55	1 x 6	1.151	50	1.251	864	1264	Black
560474◊	1/0	3	19	0.361	55	1 x 6	1.233	50	1.333	1069	1499	Black
560482◊	2/0	3	19	0.405	55	1 x 6	1.328	50	1.428	1326	1816	Black
890339◊	3/0	3	19	0.456	55	1 x 4	1.436	50	1.536	1699	2256	Black
383679◊	4/0	3	19	0.512	55	1 x 4	1.631	60	1.751	2109	2786	Black
601377	250	3	37	0.558	65	1 x 4	1.769	60	1.889	2469	3379	Black
383646◊	350	3	37	0.661	65	1 x 3	1.983	60	2.103	3438	4551	Black
380618◊	500	3	37	0.789	65	1 x 2	2.253	75	2.403	4884	6180	Black
582274	500	3	37	0.789	65	1 x 4/0	2.341	75	2.491	5337	6691	Black
890391	600	3	61	0.865	80	1 x 4/0	2.507	75	2.657	6272	7604	Black
890405	750	3	61	0.968	80	1 x 1	2.758	75	2.908	7277	9227	Black

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	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
606939	8	3	5.7	396	0.653	0.786	0.033	0.052	50	55
606947	6	3	6.2	629	0.411	0.495	0.027	0.051	65	75
606954◊	4	3	7.0	1001	0.258	0.310	0.022	0.048	85	95
671892	3	3	7.3	1262	0.205	0.246	0.020	0.047	100	115
560466◊	2	3	7.8	1592	0.162	0.195	0.018	0.045	115	130
550801	1	3	8.8	2008	0.128	0.154	0.019	0.046	130	145
560474◊	1/0	3	9.3	2534	0.102	0.122	0.017	0.044	150	170
560482◊	2/0	3	10.0	3194	0.081	0.097	0.016	0.043	175	195
890339◊	3/0	3	10.8	4027	0.064	0.078	0.014	0.042	200	225
383679◊	4/0	3	12.3	5078	0.051	0.062	0.013	0.041	230	260
601377	250	3	13.2	6000	0.043	0.053	0.014	0.041	255	290
383646◊	350	3	14.7	8400	0.031	0.039	0.012	0.040	310	350
380618◊	500	3	16.8	12000	0.022	0.029	0.010	0.039	380	430
582274	500	3	17.4	12000	0.022	0.029	0.010	0.039	380	430
890391	600	3	18.6	14400	0.018	0.025	0.011	0.039	420	475
890405	750	3	20.4	18000	0.014	0.022	0.010	0.038	475	535

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