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.

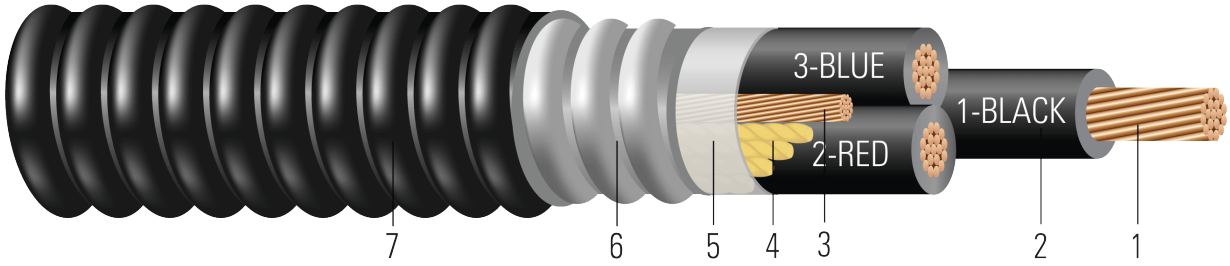


Image not to scale. See Table 1 for dimensions.

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 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)

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

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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
	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
606947	6	3	7	0.177	45	1 x 8	0.788	50	0.888	297	545
606954◊	4	3	7	0.225	45	1 x 8	0.898	50	0.998	441	713
671892	3	3	7	0.252	45	1 x 6	0.945	50	1.045	574	891
560466◊	2	3	7	0.282	45	1 x 6	1.019	50	1.119	702	1046
550801	1	3	19	0.322	55	1 x 6	1.151	50	1.251	864	1264
560474◊	1/0	3	19	0.361	55	1 x 6	1.233	50	1.333	1069	1499
560482◊	2/0	3	19	0.405	55	1 x 6	1.328	50	1.428	1326	1816
890339◊	3/0	3	19	0.456	55	1 x 4	1.436	50	1.536	1699	2256
383679◊	4/0	3	19	0.512	55	1 x 4	1.631	60	1.751	2109	2786
601377	250	3	37	0.558	65	1 x 4	1.769	60	1.889	2469	3379
383646◊	350	3	37	0.661	65	1 x 3	1.983	60	2.103	3438	4551
380618◊	500	3	37	0.789	65	1 x 2	2.253	75	2.403	4884	6180
582274	500	3	37	0.789	65	1 x 4/0	2.341	75	2.491	5337	6691
890391	600	3	61	0.865	80	1 x 4/0	2.507	75	2.657	6272	7604
890405	750	3	61	0.968	80	1 x 1	2.758	75	2.908	7277	9227

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

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