CU 600/1000V XLPE Insulation 50% Ground 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 Three Bare CU 50% Ground Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket with. Silicone Free.

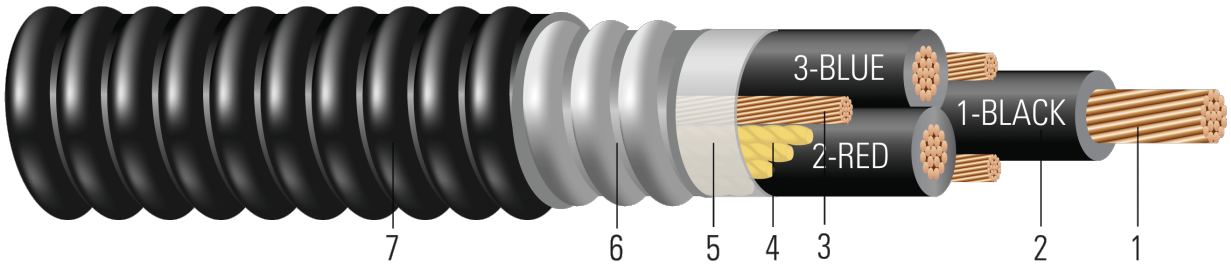

Image not to scale. See Table 1 for dimensions.

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:** Three separate Ground Wires with a combined circular mil of 50% of the phase conductor. Stranded class B compressed 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. The ground is sized to 50% of the phase conductor with three separate bare grounds one in each interstecie between condutors. 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 Flame Test (70,000) BTU/hr Vertical Tray Test

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SAMPLE PRINT LEGEND:

SQFTG_DUAL} SOUTHWIRE {UL} 3/C (XXX KCMIL) XXXmm2 CU XX MILS XLP 600 VOLTS GW 3 X 1 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	
655383	1/0	3	19	0.362	55	3 x 6	1.259	50	1.364	1233	1663	BK
665396	2/0	3	19	0.405	55	3 x 6	1.354	50	1.459	1491	1955	BK
655386	3/0	3	19	0.456	55	3 x 4	1.462	50	1.567	1960	2485	BK
TBA	4/0	3	19	0.512	55	3 x 4	1.657	50	1.757			BK
TBA	250	3	37	0.558	65	3 x 4	1.799	50	1.899			BK
TBA	300	3	37	0.611	65	3 x 3	1.914	60	2.034			BK
576888	350	3	37	0.661	65	3 x 2	2.005	60	2.131	3895	4752	BK
552598	500	3	37	0.789	65	3 x 1	2.275	75	2.432	5461	6558	BK
TBA	600	3	61	0.866	80	3 x 1/0	2.529	60	2.649			BK
588666	750	3	61	0.968	80	3 x 2/0	2.784	75	2.942	8262	9662	BK

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
655383	1/0	3	9.5	2534	0.102	0.127	0.044	150	170
665396	2/0	3	10.2	3194	0.082	0.102	0.043	175	195
655386	3/0	3	11	4027	0.064	0.079	0.042	200	225
TBA	4/0	3	12.3	5078	0.051	0.063	0.041	230	260
TBA	250	3	13.3	6000	0.043	0.053	0.041	255	290
TBA	300	3	14.2	7200	0.036	0.045	0.041	285	320
576888	350	3	14.9	8400	0.031	0.039	0.04	310	350
552598	500	3	17	12000	0.021	0.027	0.039	380	430
TBA	600	3	18.5	14400	0.018	0.024	0.039	420	475
588666	750	3	20.6	18000	0.014	0.019	0.038	475	535

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

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