



## **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.

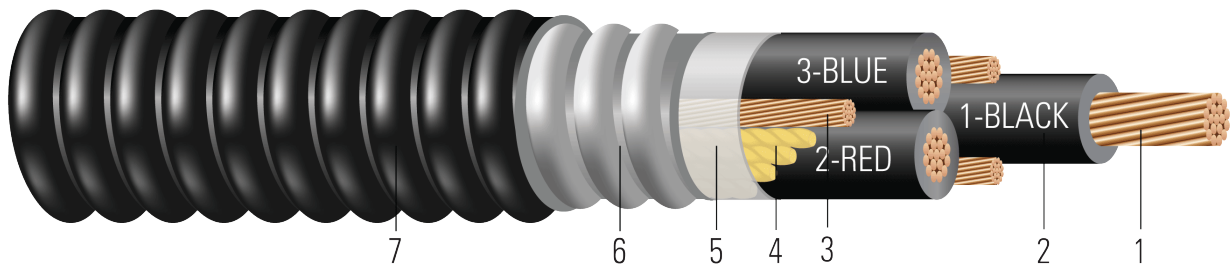


Image not to scale. See Table 1 for dimensions.

### **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 conductors. 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 Flame Test (70,000) BTU/hr Vertical Tray Test





**SAMPLE PRINT LEGEND:**

SQFTG\_DUAL} SOUTHWIRE {UL} 3/C (XXX KCMIL) XXXmm<sup>2</sup> 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
	AWG/Kcmil		No. of Strands	inch	mil	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
655383	1/0	3	19	0.361	55	3 x 6	1.246	50	1.352	1233	1677
665396	2/0	3	19	0.405	55	3 x 6	1.354	50	1.460	1490	1983
655386	3/0	3	19	0.456	55	3 x 4	1.449	50	1.555	1960	2524
TBA	4/0	3	19	0.512	55	3 x 4	1.656	60	1.776	2105	2800
671883	250	3	37	0.558	65	3 x 4	1.769	60	1.889	2729	3597
TBA	250	3	37	0.558	65	3 x 2	1.798	60	1.918	2465	3269
TBA	300	3	37	0.61	65	3 x 2	1.910	60	2.030	2966	3934
576888	350	3	37	0.661	65	3 x 2	1.983	60	2.103	3895	4780
552598	500	3	37	0.789	65	3 x 1	2.275	75	2.425	5460	6629
TBA	600	3	61	0.865	80	3 x 1/0	2.526	75	2.676	5814	7361
588666	750	3	61	0.968	80	3 x 2/0	2.758	75	2.908	8261	9751

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
655383	1/0	3	9.5	2534	0.102	0.122	0.017	0.044	150	170
665396	2/0	3	10.2	3194	0.081	0.097	0.016	0.043	175	195
655386	3/0	3	10.9	4027	0.064	0.078	0.014	0.042	200	225
TBA	4/0	3	12.4	5078	0.051	0.062	0.013	0.041	230	260
671883	250	3	13.2	6000	0.043	0.053	0.014	0.041	255	290
TBA	250	3	13.4	6000	0.043	0.053	0.014	0.041	255	290
TBA	300	3	14.2	7200	0.036	0.045	0.013	0.041	285	320
576888	350	3	14.7	8400	0.031	0.039	0.012	0.040	310	350
552598	500	3	17.0	12000	0.022	0.029	0.010	0.039	380	430
TBA	600	3	18.7	14400	0.018	0.025	0.011	0.039	420	475
588666	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.

