

3/C CU 600V XLPE XHHW-2 AIA PVC Power Cable With 50% Ground. 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.

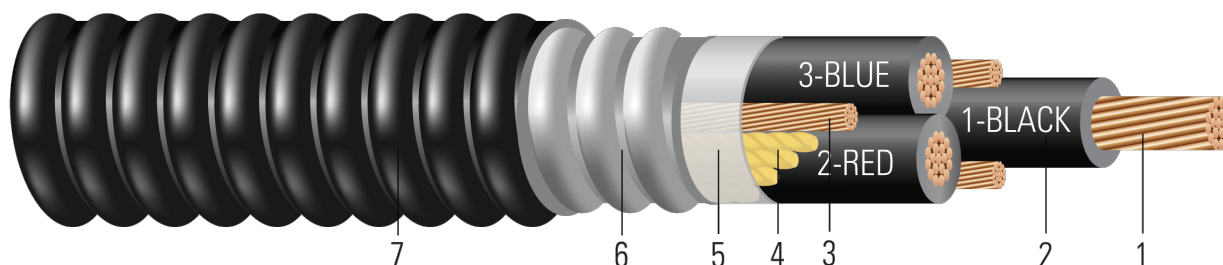


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- 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
- Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
- Binder:** Polypropylene tape
- Armor:** Aluminum Interlocked Armor (AIA)
- 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 Standard Specification for 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 MASTER-DESIGN {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{D}C USA -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com



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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	Copper Weight	Approx. Weight
	AWG/Kcmil	inch	mil	inch	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
655383	1/0	0.360	55	0.476	3 x 6	1.246	50	1.352	1233	1672
TBA	2/0	0.404	55	0.514	3 x 6	1.320	50	1.420	1491	2005
655386	3/0	0.454	55	0.570	3 x 4	1.449	50	1.555	1960	2519
TBA	4/0	0.510	55	0.620	3 x 4	1.549	60	1.669	2370	3040
671883	250	0.542	65	0.672	3 x 4	1.669	60	1.790	2729	3518
TBA	250	0.558	65	0.688	3 x 2	1.696	60	1.816	2960	3730
TBA	300	0.611	65	0.741	3 x 2	1.911	60	2.031	3427	4357
576888	350	0.661	65	0.791	3 x 2	2.019	60	2.139	3896	4899
552598	500	0.789	65	0.919	3 x 1	2.295	75	2.445	5461	6720
TBA	600	0.866	80	1.026	3 x 1/0	2.526	75	2.676	6602	8083
588666	750	0.968	80	1.128	3 x 2/0	2.746	75	2.909	8262	9735

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F). Ampacities have been adjusted for more than three current-carrying conductors based on Table 310.15(C) 1.

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	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
655383	1/0	9.3	2534	0.102	0.128	0.028	126	150	170
TBA	2/0	9.9	3194	0.081	0.102	0.027	144	172	195
655386	3/0	10.7	4027	0.064	0.081	0.027	167	199	225
TBA	4/0	11.7	5078	0.051	0.064	0.026	192	230	260
671883	250	12.7	6000	0.043	0.055	0.027	215	257	290
TBA	250	12.7	6000	0.043	0.055	0.027	215	257	290
TBA	300	14.2	7200	0.036	0.046	0.026	237	283	320
576888	350	15.0	8400	0.031	0.040	0.026	259	310	350
552598	500	17.1	12000	0.022	0.029	0.025	319	381	430
TBA	600	18.7	14400	0.018	0.024	0.026	352	421	475
588666	750	20.3	18000	0.014	0.020	0.025	397	474	535

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F). Ampacities have been adjusted for more than three current-carrying conductors based on Table 310.15(C) 1.

