CU 600V XLPE Insulation AIA PVC Jacket. XHHW-2

Type MC Control Cable 600Volt Copper Conductors, Cross Linked Polyethylene (XLPE) Insulation XHHW-2 Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket with 1 Insulated Green CU Ground

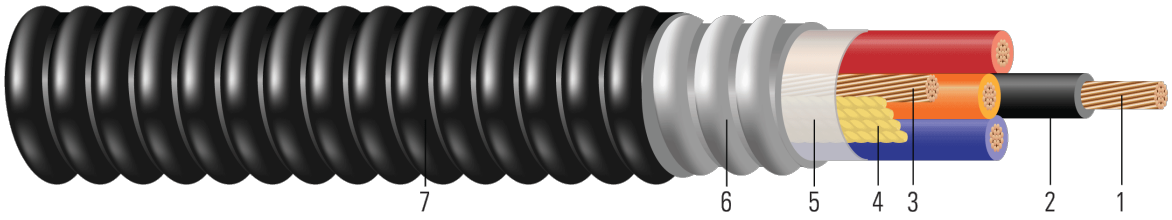

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** 7 strands class B compressed tinned copper per ASTM B33 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) XHHW-2, 30 Mils thick for all cable sizes
3. **Grounding Conductor:** Class B compressed stranded bare copper
4. **Filler:** Polypropylene filler on cables with 5 or less conductors
5. **Binder:** Polyester flat thread binder tape applied for cables with more than 5 conductors
6. **Armor:** Aluminum Interlocked Armor (AIA)
7. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC control 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.

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 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-58-679 Control Cable Conductor Identification Method 1 Table 2
- ICEA S-73-532 Standard for Control, Thermocouple Extension and Instrumentation Cables
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy

SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE MASTER-DESIGN {UL} X/C (XX AWG) X.XXmm2 CU XX MILS XLP 600 VOLTS GW 1 X XX AWG CU TYPE MC FOR CT USE SUN. RES. DIRECT BURIAL 90{D}C USA -- {NOM}-ANCE Tipo MC XHHW-2 CT

UPDATED: Aug. 18, 2023, 2:40 p.m.UTC REVISION: 1.000.001

Table 1 – Physical and Electrical Data

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Cond.	Insul. Thickness	Ground	Diameter Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C	Min Bending Radius	Allowable Ampacity At 60°C *	Allowable Ampacity 75°C *
	AWG	No.	strands	inch	mil	No. x AWG	inch	mil	inch	lb /1000ft	lb /1000ft	Ω /1000ft	Ω /1000ft	inch	Amp	Amp
14 AWG																
555413*	14	3	7	0.070	30	1 x 10	0.480	50	0.580	54	175	2.630	3.288	4.1	15	15
TBA	14	4	7	0.070	30	1 x 10	0.530	50	0.630	66	204	2.630	3.288	4.4	14	15
12 AWG																
578426	12	2	7	0.087	30	1 x 12	0.528	50	0.628	61	203	1.660	2.075	4.4	20	20
555149	12	3	7	0.087	30	1 x 12	0.565	50	0.665	81	239	1.660	2.075	4.7	16	20
573502	12	4	7	0.087	30	1 x 12	0.607	50	0.707	102	277	1.660	2.075	5.0	16	20
10 AWG																
568457	10	2	7	0.111	30	1 x 10	0.579	50	0.679	97	257	1.040	1.300	4.8	30	30
568458	10	3	7	0.111	30	1 x 10	0.622	50	0.722	130	308	1.040	1.300	5.1	24	28
573500	10	4	7	0.111	30	1 x 10	0.671	50	0.771	162	362	1.040	1.300	5.4	24	28

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

***** Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

***** Ampacities have been adjusted for more than Three Current-Carrying Conductors.