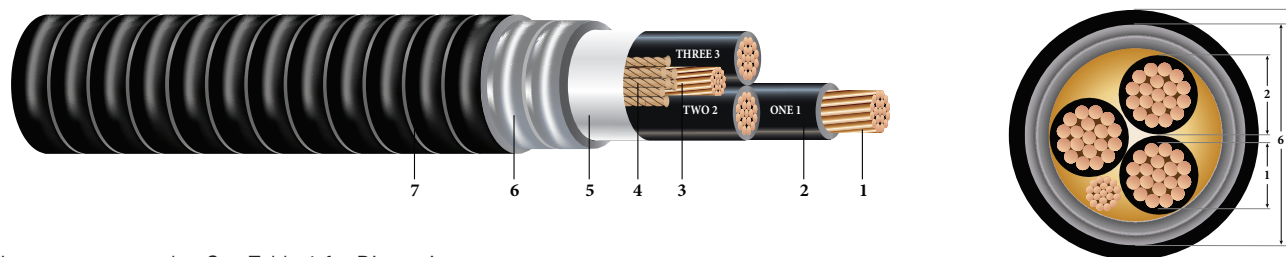


3/C CU 600V XLPE XHHW-2 AIA PVC Power Cable Type MC

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



Images 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. Constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper
- ASTM B8 Concentric-lay-standard copper
- UL 44 Thermoset Insulated wires And cables
- UL 1569 Metal-Clad Cables
- UL 1685 - Flame Test
- UL 1581 - Electrical Wires, Cables and Flexible Cords
- UL 1309 – Listed as Marine Shipboard Cable
- ABS Listed as CWCMC
- IEEE 1202/FT4 - Vertical Tray Flame Test (70,000 Btu/hr) And ICEA T-29-520 - (210,000 Btu/hr)
- ICEA S-58-679 - Control Cable Conductor Identification Method 4
- ICEA S-95-658 NEMA WC70 - Power cables rated 2000 volts or less for the distribution of electrical energy

SAMPLE PRINT LEGEND:

SOUTHWIRE EXXXXX #P# (UL) [#AWG Or #kcmil] CU XHHW-2 XLPE/PVC AIA 600V Type MC For CT USE SUN. RES. For DIRECT BURIAL FT4 YEAR (NEC) [SEQUENTIAL FEET MARKS]



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Table 1 – Weights & Measurements

Stock Code	Cond. Size	Dia Over Cond. (1)	Insul. Thickness	Dia Over Insul. (2)	Dia. Over Armor (6)	Ground No. x AWG	Jacket Thickness mils	Approx. OD (7) inches	Copper Weight lbs./MFT	Approx. Weight lbs./MFT
	AWG	inches	inches	inches	inches					
606939	8	0.139	45	0.229	0.705	1 x 10	50	0.805	187	404
606947	6	0.174	45	0.264	0.781	1 x 8	50	0.881	297	547
606954 [◇]	4	0.221	45	0.311	0.881	1 x 8	50	0.981	442	736
560466 [◇]	2	0.277	45	0.367	1.003	1 x 6	50	1.103	703	1054
TBA	1	0.321	55	0.431	1.141	1 x 6	50	1.241	865	1288
560474 [◇]	1/0	0.360	55	0.470	1.225	1 x 6	50	1.325	1069	1534
560482 [◇]	2/0	0.404	55	0.514	1.320	1 x 6	50	1.420	1327	1841
890339 [◇]	3/0	0.454	55	0.564	1.428	1 x 4	50	1.528	1700	2272
383679 [◇]	4/0	0.510	55	0.620	1.549	1 x 4	60	1.669	2110	2779
601377	250	0.558	65	0.688	1.696	1 x 4	60	1.816	2469	3240
383646 [◇]	350	0.661	65	0.791	2.019	1 x 3	60	2.139	3440	4442
380618 [◇]	500	0.789	65	0.919	2.295	1 x 2	75	2.445	4885	6144
890391	600	0.866	80	1.026	2.526	1 x 4/0	75	2.676	6222	7573
890405	750	0.968	80	1.128	2.746	1 x 1	75	2.896	7278	8933

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Standard stock item

Table 2 – Electrical and Engineering Data

Stock Code	Cond. Size AWG	Min. Bending Radius Inches	Max. Pull Tension lbs.	Resistance		Reactance X _L @ 60Hz Ω/MFT	Ø Short Circuit Current 6 Cycles Amps	Allowable Ampacities [†]		
				DC @ 25°C Ω/MFT	AC @ 90°C Ω/MFT			60 °C Amps	75 °C Amps	90 °C Amps
606939	8	5.6	396	0.652	0.815	0.033	3754	40	50	55
606947	6	6.2	630	0.411	0.514	0.031	5966	55	65	75
606954 [◇]	4	6.9	1002	0.258	0.323	0.030	9491	70	85	95
560466 [◇]	2	7.7	1593	0.162	0.203	0.028	15089	95	115	130
TBA	1	8.7	2009	0.129	0.162	0.028	19029	110	130	145
560474 [◇]	1/0	9.3	2534	0.102	0.128	0.028	24011	125	150	170
560482 [◇]	2/0	9.9	3194	0.081	0.102	0.027	30264	145	175	195
890339 [◇]	3/0	10.7	4027	0.064	0.081	0.027	38154	165	200	225
383679 [◇]	4/0	11.7	5078	0.051	0.064	0.026	48114	195	230	260
601377	250	12.7	6000	0.043	0.055	0.027	56845	215	255	290
383646 [◇]	350	15.0	8400	0.031	0.040	0.026	79583	260	310	350
380618 [◇]	500	17.1	12000	0.022	0.029	0.025	113690	320	380	430
890391	600	18.7	14400	0.018	0.024	0.026	136428	350	420	475
890405	750	20.3	18000	0.014	0.020	0.025	170535	400	475	535

[†] Ampacities are based on Table 310.15 (B)(16) of the NEC, 2014 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

