

3/C CU 600V XLPE XHHW-2 ARMOR-X SOLONON® LSZH-TP Power Cable With Ground

Type MC-HL Power Cable 600 Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Continuous Corrugated Welded Armor (Armor-X), Thermoplastic Solonon® Low Smoke Zero Halogen (LSZH-TP) Jacket with Bare CU Ground

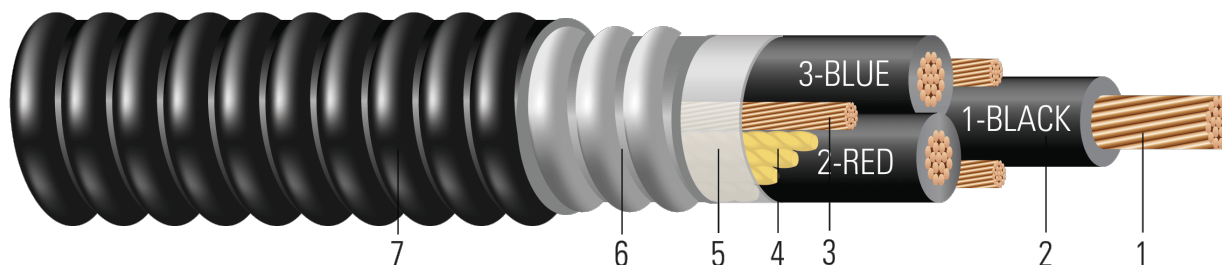


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
- Binder:** Polypropylene tape
- Armor:** Continuous Corrugated Welded Armor (Armor-X)
- Overall Jacket:** Thermoplastic Solonon® Low Smoke Zero Halogen (LSZH-TP) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC-HL Armor-X® 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, 250°C for short circuit conditions, and -50°C for cold bend. For uses in Class I, II, and III, Division 1 and 2 hazardous locations per NEC Article 501, 502, and 503. Cables with 3 ground wires suitable for VFD application.

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 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- 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
- ABS Listed as CWC/MC



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SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE{R} MASTER-DESIGN {UL} ARMOR-X TYPE MC-HL 3/C XXX AWG (XX{mm²}) CU XHHW-2 GW 3 X X AWG 90{D}C SOLONON{R} JACKET -40{D}C ST1 SUN.RES. DIR. BUR. FOR CT USE 600V IEEE1202/FT4 -- VFD -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

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
TBA	8	0.139	45	0.229	3 x 14	0.700	50	0.800	193	399
TBA	6	0.174	45	0.264	3 x 12	0.790	50	0.890	307	547
647699	4	0.221	45	0.311	1 x 8	0.920	50	1.020	452	740
677933	2	0.277	45	0.367	1 x 6	1.020	50	1.120	718	1062
TBA	1/0	0.360	55	0.470	3 x 10	1.350	50	1.450	1084	1638
TBA	2/0	0.404	55	0.514	3 x 10	1.470	50	1.570	1342	1955
672673	2/0	0.406	58	0.522	3 x 10	1.470	60	1.590	1342	2011
586674	3/0	0.454	55	0.564	3 x 8	1.540	60	1.660	1724	2424
TBA	4/0	0.510	55	0.620	3 x 8	1.670	60	1.790	2134	2910
TBA	250	0.558	65	0.688	3 x 8	1.845	60	1.965	2493	3390
TBA	350	0.661	65	0.791	3 x 6	2.200	60	2.320	3521	4600
TBA	500	0.789	65	0.919	3 x 6	2.430	75	2.580	4924	6259
TBA	750	0.968	80	1.128	3 x 4	2.880	75	3.030	7408	9145

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
TBA	8	5.6	396	0.652	0.815	0.033	40	50	55
TBA	6	6.2	630	0.411	0.514	0.031	55	65	75
647699	4	7.1	1002	0.258	0.323	0.030	70	85	95
677933	2	7.8	1593	0.162	0.203	0.028	95	115	130
TBA	1/0	10.2	2534	0.102	0.128	0.028	125	150	170
TBA	2/0	11.0	3194	0.081	0.102	0.027	145	175	195
672673	2/0	23.9	3194	0.081	0.102	0.027	145	175	195
586674	3/0	11.6	4027	0.064	0.081	0.027	165	200	225
TBA	4/0	12.5	5078	0.051	0.064	0.026	195	230	260
TBA	250	13.8	6000	0.043	0.055	0.027	215	255	290
TBA	350	16.2	8400	0.031	0.040	0.026	260	310	350
TBA	500	18.1	12000	0.022	0.029	0.025	320	380	430
TBA	750	21.2	18000	0.014	0.020	0.025	400	475	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.

