CU 600/1000V XLPE Insulation ARMOR-X® Thermoplastic LSZH-TP Jacket. XHHW-2

Type MC-HL Power Cable 600Volt Four 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 1 Bare CU Ground

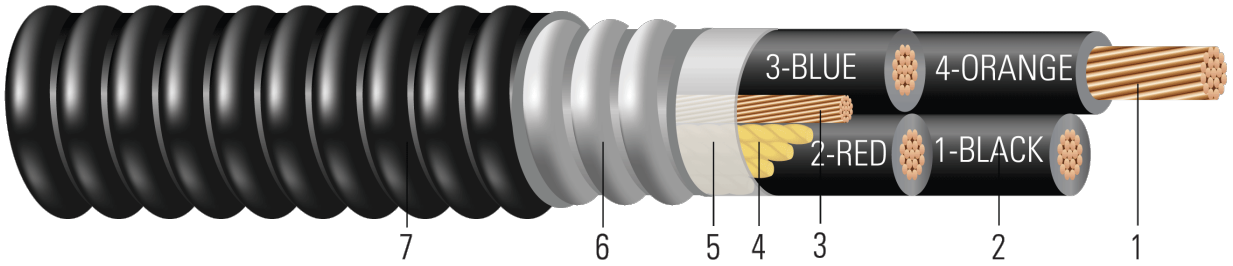

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
3. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and B8
4. **Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
5. **Binder:** Polypropylene tape
6. **Armor:** ARMOR-X® Continuous Corrugated Welded Armor
7. **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.

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
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (500kcmil & Larger)

UPDATED: Sept. 28, 2023, 7:07 p.m.UTC REVISION: 1.000.005

SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE{R} MASTER-DESIGN {UL} ARMOR-X® TYPE MC-HL 4/C XXX AWG (XXX{mm2}) CU XHHW-2 GW 1 X X AWG 90{D}C SOLONON{R} JACKET -40{D}C ST1 SUN.RES. DIR. BUR. FOR CT USE 600V IEEE1202/FT4 -- {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
TBA	8	4	7	0.141	45	1 x 10	0.79	50	0.890	237	504
TBA	6	4	7	0.177	45	1 x 8	0.92	50	1.020	378	691
641520	4	4	7	0.225	45	1 x 8	1.02	50	1.120	569	914
TBA	2	4	7	0.282	45	1 x 6	1.22	50	1.320	907	1358
TBA	1/0	4	19	0.361	55	1 x 6	1.48	50	1.580	1395	2030
572421	2/0	4	19	0.405	55	1 x 4	1.54	60	1.660	1790	2444
550856	4/0	4	19	0.512	55	1 x 4	1.85	60	1.965	2769	3541
TBA	250	4	37	0.558	65	1 x 4	2.04	60	2.160	3245	4253
TBA	350	4	37	0.661	65	1 x 3	2.29	75	2.440	4526	5787
563069	500	4	37	0.789	65	1 x 2	2.67	75	2.820	6443	7756
TBA	750	4	61	0.968	80	1 x 1	3.22	85	3.390	9607	11602

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	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	4	6.2	423	0.653	0.786	0.052	32	40	44
TBA	6	4	7.1	672	0.411	0.495	0.051	44	52	60
641520	4	4	7.8	1069	0.258	0.310	0.048	56	68	76
TBA	2	4	9.2	1699	0.162	0.195	0.045	76	92	104
TBA	1/0	4	11.0	2703	0.102	0.122	0.044	100	120	136
572421	2/0	4	11.6	3407	0.081	0.097	0.043	116	140	156
550856	4/0	4	13.7	5417	0.051	0.062	0.041	156	184	208
TBA	250	4	15.1	6400	0.043	0.053	0.041	172	204	232
TBA	350	4	17.0	8960	0.031	0.039	0.040	208	248	280
563069	500	4	19.7	10000	0.022	0.029	0.039	256	304	344
TBA	750	4	23.7	10000	0.014	0.022	0.038	320	380	428

***** Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.
***** Ampacities have been adjusted for more than Three Current-Carrying Conductors.