CU 600/1000V XLPE Insulation ARMOR-X® PVC Jacket XHHW-2. VFD Cable - CT Rated -Sunlight Resistant - For Direct Burial - Silicone Free

Type MC-HL Power Cable 600Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Continuous Corrugated Welded Armor - ARMOR-X®, Polyvinyl Chloride (PVC) Jacket with 3 Bare CU Ground

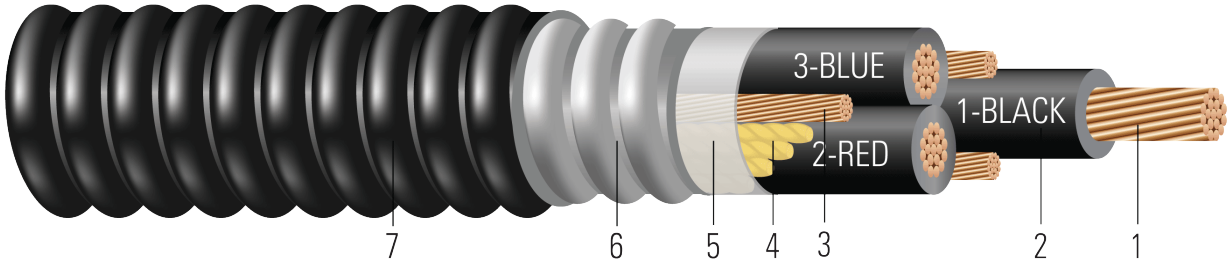


Image not to scale. See Table 1 for dimensions.

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:** Polyvinyl Chloride (PVC) 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. Suitable for VFD application.

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
- CSA C22.2 No. 123 Metal sheathed cables RA90-HL
- 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 4
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 - (210,000 Btu/hr)

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SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE ARMOR-X® {UL} TYPE MC-HL 3/C XXX KCMIL (XXX{mm2}) CU XHHW-2 GW 3 X X AWG 90°C JACKET -40°C SUN. RES. DIR. BUR. FOR CT USE 600V IEEE1202/FT4 -- {CSA} RA90-HL AG14 XLPE -40°C 600V FT4 SR 90°C -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4 -- VFD USA

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
550593◊	8	3	7	0.141	45	3 x 14	0.750	50	0.856	192	407
890513◊	6	3	7	0.177	45	3 x 12	0.840	50	0.946	306	547
890514◊	4	3	7	0.225	45	3 x 12	0.920	50	1.026	449	714
890515◊	2	3	7	0.282	45	3 x 10	1.060	50	1.166	717	1070
890516◊	1/0	3	19	0.361	55	3 x 10	1.350	50	1.456	1085	1745
890517◊	2/0	3	19	0.405	55	3 x 10	1.470	50	1.576	1342	1935
890518	3/0	3	19	0.456	55	3 x 8	1.540	60	1.666	1724	2420
890519◊	4/0	3	19	0.512	55	3 x 8	1.590	60	1.716	2134	2837
890520◊	250	3	37	0.558	65	3 x 8	1.845	60	1.971	2493	3351
890521◊	350	3	37	0.661	65	3 x 6	2.040	60	2.166	3520	4535
890522◊	500	3	37	0.789	65	3 x 6	2.290	75	2.448	4923	5990
641426	500	3	37	0.789	65	1 x 4/0	2.430	75	2.588	5337	6449
646751	600	3	61	0.865	80	3 x 6	2.670	75	2.828	5858	7243
890523◊	750	3	61	0.968	80	3 x 4	3.000	75	3.158	7406	9645
TBA	1000	3	61	1.117	80	3 x 4	3.220	85	3.390	9673	11993

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

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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	Capacitive Reactance @ 60Hz	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	MΩ*1000ft	Ω/1000ft	Amp	Amp
550593◊	8	3	6.0	396	0.653	0.786	0.033	0.052	50	55
890513◊	6	3	6.6	629	0.411	0.495	0.027	0.051	65	75
890514◊	4	3	7.2	1001	0.258	0.310	0.022	0.048	85	95
890515◊	2	3	8.2	1592	0.162	0.195	0.018	0.045	115	130
890516◊	1/0	3	10.2	2534	0.102	0.122	0.017	0.044	150	170
890517◊	2/0	3	11.0	3194	0.081	0.097	0.016	0.043	175	195
890518	3/0	3	11.7	4027	0.064	0.078	0.014	0.042	200	225
890519◊	4/0	3	12.0	5078	0.051	0.062	0.013	0.041	230	260
890520◊	250	3	13.8	6000	0.043	0.053	0.014	0.041	255	290
890521◊	350	3	15.2	8400	0.031	0.039	0.012	0.040	310	350
890522◊	500	3	17.1	12000	0.022	0.029	0.010	0.039	380	430
641426	500	3	18.1	12000	0.022	0.029	0.010	0.039	380	430
646751	600	3	19.8	14400	0.018	0.025	0.011	0.039	420	475
890523◊	750	3	22.1	18000	0.014	0.022	0.010	0.038	475	535
TBA	1000	3	23.7	24000	0.011	0.018	0.009	0.037	545	615

* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.

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