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

Type MC-HL Power Cable 600 or 1000 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 Copper Grounds

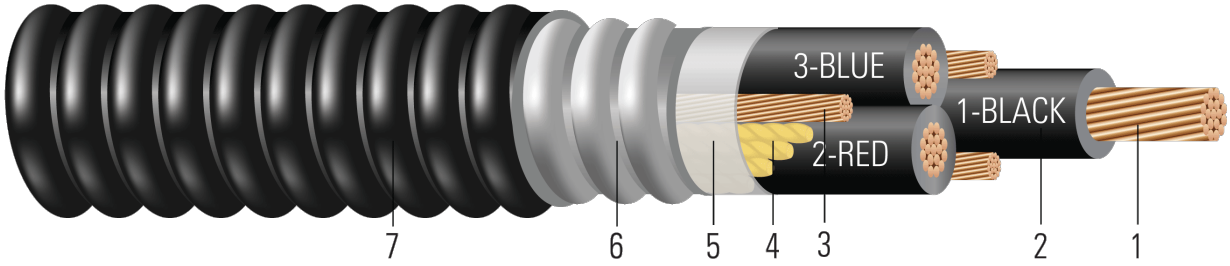

Image not to scale. See Table 1 for dimensions.

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 Conductors:** 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)

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 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)
- UL 2225 Cables and Cable-Fittings For Use In Hazardous (Classified) Locations
- 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
- ICEA S-138-738 Power Cables Rated 2000 Volts or Less for use Between Variable Frequency Drives and Motors

- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test

SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE® {UL} ARMOR-X® TYPE MC-HL 3/C XX AWG or KCMIL (XX.X{MM2}) CU XHHW-2 GW 3 X XX AWG 90°C SOLONON® JACKET -40°C ST1 SUN.RES. DIR. BUR. FOR CT USE 600V/1kV IEEE1202/FT4 -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

Table 1 – Weights and Measurements

Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	Jacket Color
AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft	
3/0	3	19	0.456	55	3 x 8	1.540	60	1.660	1724	2427	Black

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

Table 2 – Electrical and Engineering Data

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
3/0	3	11.6	4027	0.064	0.078	0.014	0.042	200	225

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

VFD Sizing Calculator