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

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

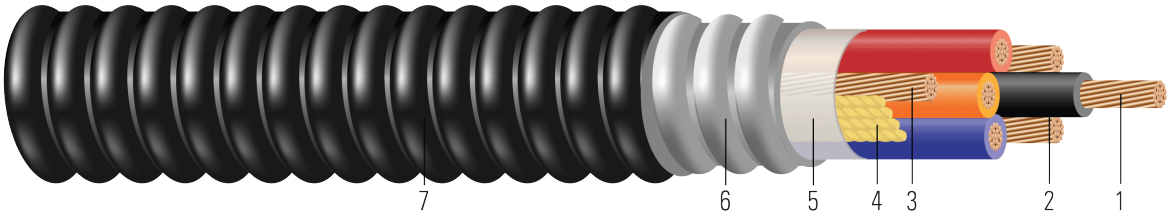



Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** 7 strands class B compressed copper per ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) XHHW-2, 30 Mils thick for all cable sizes
3. **Grounding Conductor:** 3 Class B compressed stranded bare copper ground per ASTM B3 and B8
4. **Filler:** Polypropylene filler on cables with 5 or less conductors
5. **Binder:** Polyester flat thread binder tape applied for cables with more than 5 conductors
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® control 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. 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
- CSA C22.2 No. 123 Metal Sheathed Cables
- CSA C22.2 No. 174 Cables in Hazardous Locations
- ICEA S-58-679 Control Cable Conductor Identification Method 1 Table 2
- ICEA S-73-532 Standard for Control, Thermocouple Extension and Instrumentation Cables
- 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 XX AWG (X.XX{mm2}) CU XHHW-2 GW 3 X XX 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



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## Table 1 – Physical and Electrical Data

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Insul. Thickness | Ground | Diameter Over Armor | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Rectance | Min Bending Radius | Allowable Ampacity 75°C | Allowable Ampacity 90°C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AWG | No. | strands | mil | No. x AWG | inch | mil | inch | lb / 1000ft | lb / 1000ft | Ω /1000ft | Ω /1000ft | Ω/1000ft | inch | Amp | Amp |
| 14 AWG | | | | | | | | | | | | | | | | |
| 550586◊ | 14 | 3 | 7 | 30 | 3 x 18 | 0.530 | 50 | 0.636 | 53 | 191 | 2.631 | 3.170 | 0.058 | 4.5 | 20 | 25 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

* Ampacities have been adjusted for more than Three Current-Carrying Conductors.