# CU 600/1000V XLPE Insulation PVC AIA PVC Jacket XHHW-2. Teck - CT Rated -Sunlight Resistant - For Direct Burial - Silicone Free

{SQMTR_DUAL} SOUTHWIRE{R} {CSA} LL90458 3/C XXX AWG (XX{mm2}) CU TECK 90 XLPE -40{D}C FT4 AG14 SUN. RES. 90{D}C 1000V HL --- {UL} E96627 TYPE MC XLPE 600V SUN. RES. DIRECT BURIAL 90{D}C --- {NOM}-ANCE Tipo MC XHHW-2 CT FT4 600V o 1000V 90{D}C USA

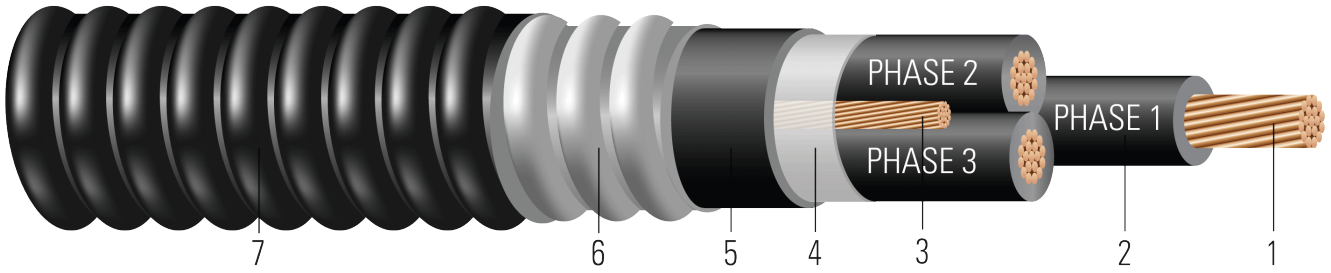


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Class B stranded copper, compressed, in accordance with ASTM B3 and B8. Sizes #1 to 4/0 are combination unilay-stranded copper conductors in accordance with ASTM B787.
2. **Insulation:** Cross-Linked Polyethylene (XLPE)
3. **Grounding Conductors:** Uninsulated Class B stranded grounding conductor
4. **Binder:** Mylar tape
5. **Inner Jacket:** Black Polyvinyl Chloride (PVC)
6. **Armor:** Aluminum Interlocked Armour (AIA)
7. **Overall Jacket:** Black PVC (optional colours available)

## APPLICATIONS AND FEATURES:

For exposed or concealed wiring in wet or dry locations. For use in ventilated, non-ventilated and ladder type cable troughs and ventilated flexible cableway in wet, dry, hazardous locations or direct buried. Sunlight Resistant. Typical applications are for control. lighting and power circuits in: pulp and paper mills, steel mills, food processing plants, commercial centers, mines, generating stations, refineries, industrial plants and chemical plants.

- -40°C - CSA Cold Bend and Impact Temperature
- -40°C - Min. Installation Temperature
- 90°C - Max. Continuous Operating Temperature

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B787 19 Wire Combination Unilay-Stranded Copper Conductors
- UL 1569 Metal-Clad Cables
- CSA C22.2 No. 174 Cables in Hazardous Locations
- CSA C22.2 No. 131 Type TECK 90 Cable
- CSA LTGG [-40°C] - as per C68.10 - for Cold Bend and Impact rating
- CSA AG14 - Acid Gas Compliance

- ICEA S-58-679 Control Cable Conductor Identification Method 3 (1-BLACK, 2-RED, 3-BLUE)
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test

## SAMPLE PRINT LEGEND:

{SQMTR_DUAL} SOUTHWIRE® {CSA} LL90458 3/C XXX AWG (XX{mm2}) CU TECK 90 XLPE -40°C FT4 AG14 SUN. RES. 90°C 1000V HL --- {UL} E96627 TYPE MC XLPE 600V SUN. RES. DIRECT BURIAL 90°C --- {NOM}-ANCE Tipo MC XHHW-2 CT FT4 600V o 1000V 90°C USA

## Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Cond. Number | Strand Count | Diameter Over Conductor | Insul. Thickness | Ground | Inner Jacket Thickness | Dia. Over Armor | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AWG/ Kcmil | | No. of Strands | inch | mil | No. x AWG | mil | inch | mil | inch | lb/1000ft | lb/1000ft |
| 640853 | 8 | 3 | 7 | 0.141 | 45 | 1 x 10 | 50 | 0.846 | 55 | 0.956 | 186 | 490 |
| 640881 | 1 | 3 | 19 | 0.322 | 55 | 1 x 6 | 50 | 1.548 | 65 | 1.680 | 864 | 1639 |
| 640878 | 1/0 | 3 | 19 | 0.361 | 55 | 1 x 6 | 50 | 1.632 | 65 | 1.764 | 1069 | 1896 |
| 640889 | 3/0 | 3 | 19 | 0.456 | 55 | 1 x 4 | 50 | 1.814 | 65 | 1.946 | 1699 | 2643 |
| 640898 | 4/0 | 3 | 19 | 0.512 | 55 | 1 x 4 | 50 | 1.943 | 65 | 2.075 | 2109 | 3205 |
| 640905 | 350 | 3 | 37 | 0.661 | 65 | 1 x 3 | 60 | 2.360 | 80 | 2.526 | 3438 | 5020 |
| TBA | 500 | 3 | 37 | 0.789 | 65 | 1 x 3 | 110 | 2.297 | 75 | 2.447 | 4878 | 6188 |

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 | 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 |
| 640853 | 8 | 3 | 6.7 | 396 | 0.653 | 0.786 | 0.033 | 0.052 | 50 | 55 |
| 640881 | 1 | 3 | 11.8 | 2008 | 0.128 | 0.154 | 0.019 | 0.046 | 130 | 145 |
| 640878 | 1/0 | 3 | 12.3 | 2534 | 0.102 | 0.122 | 0.017 | 0.044 | 150 | 170 |
| 640889 | 3/0 | 3 | 13.6 | 4027 | 0.064 | 0.078 | 0.014 | 0.042 | 200 | 225 |
| 640898 | 4/0 | 3 | 14.5 | 5078 | 0.051 | 0.062 | 0.013 | 0.041 | 230 | 260 |
| 640905 | 350 | 3 | 17.7 | 8400 | 0.031 | 0.039 | 0.012 | 0.040 | 310 | 350 |
| TBA | 500 | 3 | 17.1 | 12000 | 0.022 | 0.029 | 0.010 | 0.039 | 380 | 430 |

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