Stock #: 640889 SPEC 45360

# 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

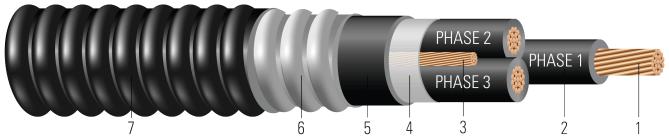


Image not to scale. See Table 1 for dimensions.

#### **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











UPDATED: March 4, 2024, 3 p.m.UTC REVISION: 1.000.006

**SPEC 45360** Stock #: 640889

- 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<br>Number | Cond.<br>Size | Cond.<br>Number | Strand<br>Count   | Diameter Over<br>Conductor | Insul.<br>Thickness | Ground       | Inner Jacket<br>Thickness | Dia. Over<br>Armor | Jacket<br>Thickness | Approx.<br>OD | Copper<br>Weight | Approx.<br>Weight |
|-----------------|---------------|-----------------|-------------------|----------------------------|---------------------|--------------|---------------------------|--------------------|---------------------|---------------|------------------|-------------------|
|                 | AWG/<br>Kcmil |                 | No. of<br>Strands | inch                       | mil                 | No. x<br>AWG | mil                       | inch               | mil                 | inch          | lb/1000ft        | lb/1000ft         |
| 640889          | 3/0           | 3               | 19                | 0.456                      | 55                  | 1 x 4        | 50                        | 1.814              | 65                  | 1.946         | 1699             | 2643              |

All dimensions are nominal and subject to normal manufacturing tolerances

## **Table 2 – Electrical and Engineering Data**

| Stock<br>Number | Cond.<br>Size | Cond.<br>Number | Min<br>Bending<br>Radius | Max Pull<br>Tension | DC Resistance<br>@ 25°C | AC Resistance<br>@ 75°C | Capacitive<br>Reactance @<br>60Hz | Inductive<br>Reactance @<br>60Hz | Allowable<br>Ampacity At<br>75°C | Allowable<br>Ampacity At<br>90°C |
|-----------------|---------------|-----------------|--------------------------|---------------------|-------------------------|-------------------------|-----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|                 | AWG/<br>Kcmil |                 | inch                     | lb                  | Ω/1000ft                | Ω/1000ft                | MΩ*1000ft                         | Ω/1000ft                         | Amp                              | Amp                              |
| 640889          | 3/0           | 3               | 13.6                     | 4027                | 0.064                   | 0.078                   | 0.014                             | 0.042                            | 200                              | 225                              |

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











<sup>♦</sup> Cable marked with this symbol is a standard stock item