Stock #: 669563 SPEC 45273

# HALO-FLEX<sup>™</sup> CU 600/1000V XLPE Insulation Braid Shield Thermoplastic CPE-TP Jacket. XHHW-2 TC-ER-HL Halo-Flex<sup>™</sup> Type TC-ER-HL Power Cable 600 or 1000 Volt Copper Conductors, Cross Linked Polyethylene (FR-XLPE) Insulation

Halo-Flex™ Type TC-ER-HL Power Cable 600 or 1000 Volt Copper Conductors, Cross Linked Polyethylene (FR-XLPE) Insulation XHHW-2 -40°C Tinned Copper Braid Shield Thermoplastic CPE-TP Jacket, Control Cable Conductor Identification Method 3

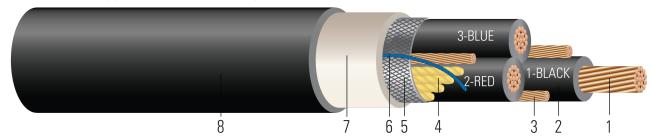


Image not to scale. See Table 1 for dimensions.

#### **CONSTRUCTION:**

- 1. **Conductor:** Flexible Stranded Rope-Lay Class I Copper per ASTM B172
- 2. **Insulation:** Fire Retardant Cross Linked Polyethylene (FR-XLPE) Type XHHW-2
- 3. **Ground:** Three symmetrical bare grounds flexible strand
- 4. Filler: Non-Hygroscopic flame retardant fillers
- 5. Shield: Tinned copper braid shield
- 6. Rip Cord: Rip cord for quick removal of extruded polymeric layer and jacket
- 7. Extruded Polymeric Layer: Extruded Polymeric Barrier Layer
- 8. Overall Jacket: Low-Friction SIM Technology® -40°C Thermoplastic Chlorinated Polyethylene (CPE-TP) Jacket

### **APPLICATIONS AND FEATURES:**

Southwire's Halo-Flex<sup>TM</sup> 600V TC-ER-HL or 1000V TC-ER 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, and 250°C for short circuit conditions. A gas/vapor-tight polymeric sheath is extruded over the core. Rated for use in Class I, II, or III, Division 1 & 2, Zone 1 & 2, hazardous locations per NEC Article 501, 502, and 503. Listed for exposed runs (TC-ER-HL) per NEC 336.10. - 40°C cold bend and cold impact. HALO-FLEX TM CPE jacket is made with patented SIM Technology. Cable can be installed in conduit without the aid of lubrication. PATENT www.patentsw.com. Shielded Halo-Flex<sup>TM</sup> cables can also be used for VFD (Variable Frequency Drive) applications where extra high frequencies are present.

#### **SPECIFICATIONS:**

- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors (As Applicable)
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- UL 1309 Marine Shipboard Cable
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- 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









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- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- RoHS-3 Complies with European Directive 2015/863
- ABS American Bureau of Shipping Approved

## **SAMPLE PRINT LEGEND:**

{SQFTG} SOUTHWIRE® HALO-FLEX{TM} TC-ER-HL E75755 {UL} XX AWG CU 3 CDRS XHHW-2 GW 3 X XX AWG TCU BRAID XLPE/CPE 90°C JACKET 600V TYPE TC-ER-HL or 1000V TYPE TC-ER SUN. RES. FOR DIRECT BURIAL FT4 -40°C OIL RES I & II ABS RoHS-3 2015/863 COMPLIANT {YYYY} 07-KA180012-MSHA









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# **Table 1 – Physical and Electrical Data**

| Stoc<br>Numb | k Cond<br>er Size | d. Cond.<br>Number | Cond.<br>Strands | Diameter<br>Over<br>Cond. | Insul.<br>Thickness | Diameter<br>Over<br>Insulation | Ground       | Jacket<br>Thickness | Approx.<br>OD | Approx.<br>Weight | DC<br>Resistance<br>@ 25°C | AC<br>Resistance<br>@ 75°C | Min<br>Bending<br>Radius | Allowable<br>Ampacity<br>At 60°C | Allowable<br>Ampacity<br>75°C | Allowabl<br>Ampacit<br>90°C |
|--------------|-------------------|--------------------|------------------|---------------------------|---------------------|--------------------------------|--------------|---------------------|---------------|-------------------|----------------------------|----------------------------|--------------------------|----------------------------------|-------------------------------|-----------------------------|
|              | AW                | 3 No.              | strands          | inch                      | mil                 | inch                           | No. x<br>AWG | mil                 | inch          | lb /<br>1000ft    | Ω /1000ft                  | Ω /1000ft                  | inch                     | Amp                              | Amp                           | Amp                         |
| 66956        | 3 1/0             | 3                  | 259              | 0.385                     | 58                  | 0.501                          | 3 x 10       | 84                  | 1.409         | 1699              | 0.109                      | 0.142                      | 16.9                     | 125                              | 150                           | 170                         |

All dimensions are nominal and subject to normal manufacturing tolerances









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

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