HALO-FLEX™ CU 600/1000V XLPE Insulation Thermoplastic CPE-TP Jacket. XHHW-2 TC-ER-HL

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

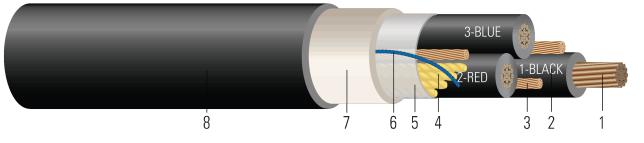


Image not to scale. See Table 1 for dimensions.

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. Separator: Mylar for ease of stripability
- 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[™] 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 [™] CPE jacket is made with patented SIM Technology. Cable can be installed in conduit without the aid of lubrication. PATENT www.patentsw.com

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- 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
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- RoHS-3 Complies with European Directive 2015/863



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com



UPDATED: Dec. 11, 2023, 9:29 p.m.UTC REVISION: 1.000.004

- ABS American Bureau of Shipping Approved
- MSHA Mine Safety Health Administration Approved

SAMPLE PRINT LEGEND:

Products $\leq 1''$

(SEQ FOOTAGE) SOUTHWIRE® HALO-FLEX{TM} E75755 (Plant Code) {UL} XX (AWG or kcmil) CU 3/C XHHW-2 CRS GW 3 X XX AWG FR-XLPE/CPE 90°C 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

Products > 1''

{SQFTG} SOUTHWIRE® HALO-FLEX{TM} TC-ER-HL E75755 {UL} XX AWG CU 3 CDRS XHHW-2 GW 3 X XX AWG T/S 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





UPDATED: Dec. 11, 2023, 9:29 p.m.UTC REVISION: 1.000.004

SPEC 45271

Table 1 – Physical and Electrical Data

Sto Nun	ock nber	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Cond.	Insul. Thickness	Diameter Over Insulation	Ground	Jacket Thickness	Approx. OD	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Rectance	Min Bending Radius	Allowable Ampacity At 60°C	Allowable Ampacity 75°C
		AWG	No.	strands	inch	mil	inch	No. x AWG	mil	inch	lb / 1000ft	Ω /1000ft	Ω /1000ft	Ω/1000ft	inch	Amp	Amp
	4 AWG																
678	561	4	3	112	0.235	45	0.329	3 x 12	80	0.999	839	0.258	0.323	0.030	4.0	70	85

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. See NEC sections 310.15 and 110.14(C) for additional requirements.



