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

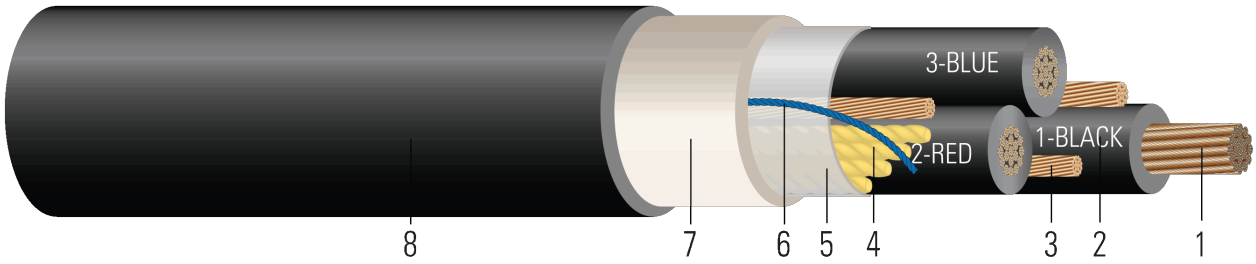


Image not to scale. See Table 1 for dimensions.

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

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

SAMPLE PRINT LEGEND:

Products ≤ 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

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Table 1 – Physical and Electrical Data

Stock Number	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
679916◊	8*	3	41	0.153	45	0.247	3 x 14	60	0.783	414	0.652	0.815	0.033	3.1	40	50
679919◊	6*	3	65	0.184	45	0.278	3 x 12	80	0.889	585	0.411	0.514	0.031	3.6	55	65
4 AWG																
678561	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
2 AWG																
674799	2	3	168	0.315	45	0.409	3 x 10	80	1.171	1194	0.162	0.203	0.028	5.9	95	115
674802	1/0	3	259	0.385	55	0.501	3 x 10	80	1.370	1710	0.102	0.128	0.028	7.0	125	150
674806	2/0	3	324	0.420	55	0.536	3 x 10	80	1.446	2025	0.081	0.102	0.027	7.2	145	175
674809	3/0	3	418	0.470	55	0.586	3 x 8	80	1.554	2614	0.064	0.081	0.027	7.7	165	200
674813	4/0	3	532	0.535	55	0.645	3 x 8	110	1.741	3114	0.051	0.064	0.026	9.0	195	230
678647	250	3	627	0.605	65	0.735	3 x 8	110	1.936	3727	0.043	0.055	0.027	10.0	215	255
674816	350	3	855	0.670	65	0.800	3 x 6	110	2.076	4999	0.031	0.040	0.026	12.1	260	310
678651	500	3	1221	0.858	65	0.988	3 x 6	110	2.482	6767	0.022	0.029	0.025	15.0	320	380
678654	750	3	1850	1.094	80	1.254	3 x 4	140	3.117	10433	0.014	0.020	0.025	19.0	400	475

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.