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

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

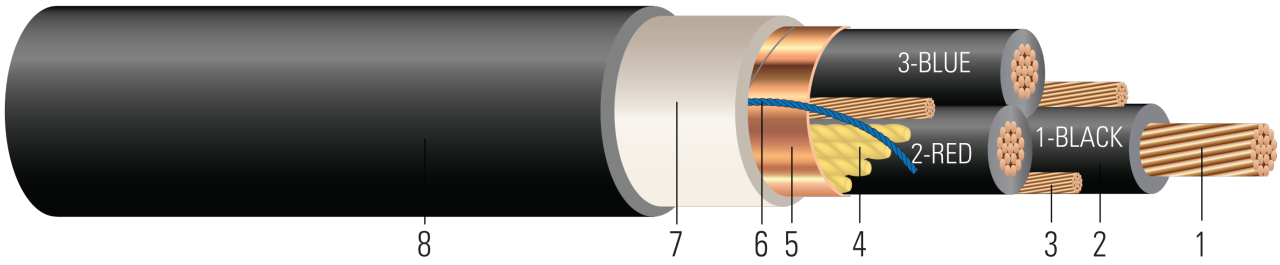

Image not to scale. See Table 1 for dimensions.

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:** 25% overlap, helically applied copper tape shield. Optional braid shield for constructions up to 3C 4/0
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 VFD 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. Shielded Halo-Flex™ cables can also be used for VFD (Variable Frequency Drive) applications where extra high frequencies are present.

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 1309 Marine Shipboard Cable (Optional)
- 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 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} VFD 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 OR ABS RoHS-3 2015/863 COMPLIANT 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	Min Bending Radius	Allowable Ampacity 75°C	Allowable Ampacity 90°C	Jacket Color
	AWG	No.	strands	inch	mil	inch	No. x AWG	mil	inch	lb / 1000ft	Ω /1000ft	Ω /1000ft	inch	Amp	Amp	
669590	750	3	1850	1.094	80	1.254	3 x 4	147	3.157	9703	0.016	0.024	37.9	475	535	Black

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.
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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