CSA TECK 90 AL 3/C 5000V NON-SHIELDED TRXLPE POWER CABLE

5000V, Non-Shielded, TRXLPE Insulated, FT4, -40°C, HL (Hazardous Locations), AG14 & 90°C

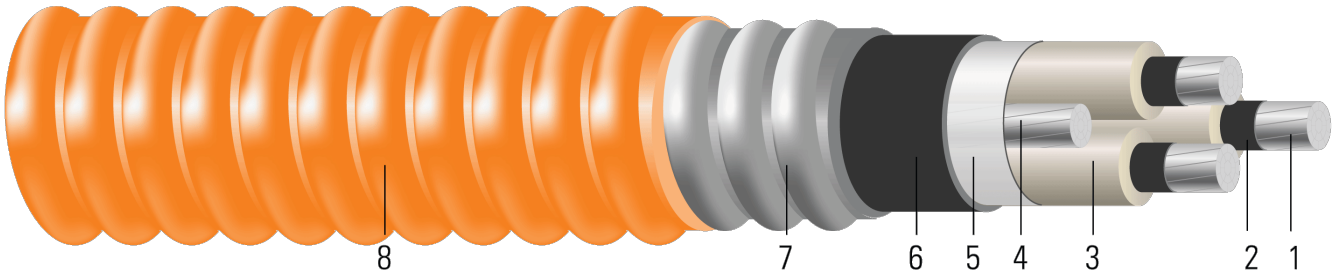

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compact stranded 8000 Series Aluminum ACM, in accordance with ASTM B801
2. **Conductor Shield:** Extruded semi-conducting thermosetting polymeric layer
3. **Insulation:** TRXLPE - Tree Retardant Cross-Linked Polyethylene, Thickness: 0.090" (2.3 mm) - nominal, 90°C
4. **Grounding Conductor:** Class B compact stranded 8000 Series, Bare Aluminum
5. **Binder:** Polypropylene tape
6. **Inner Jacket:** Black PVC, Thickness: No. 2 AWG to No. 3/0 AWG = 0.080" (2.0 mm), No. 4/0 AWG to 500 kcmil = 0.110" (2.8 mm), 750 kcmil to 1000 kcmil = 0.140" (3.6 mm)
7. **Armor:** Aluminum Interlocked Armour (AIA)
8. **Overall Jacket:** Orange PVC (optional colours available), Thickness: No. 2 AWG to 250 kcmil = 0.060" (1.5 mm), 350 kcmil to 750 kcmil = 0.075" (1.9 mm), 1000 kcmil = 0.090" (2.3 mm)

APPLICATIONS AND FEATURES:

Southwire's 5KV TECK 90, 5000V, non-shielded, TRXLPE insulated power cable is a CSA approved armoured cable for industrial and commercial medium voltage applications. FT4, -40°C, HL, AG14 and 90°C rated for use in harsh Canadian environments. Rated for installation in cable trays, duct banks, direct burial, troughs, hazardous locations, continuous rigid cable supports, and is concrete encaseable.

- -40°C - CSA Cold Bend and Impact Temperature
- -25°C - Min. Installation Temperature
- 90°C - Max. Continuous Operating Temperature
- 140°C for Emergency Overload Temperature
- 250°C for Short Circuit Temperature

SPECIFICATIONS:

- CSA C22.2 No. 174 Cables in Hazardous Locations
- CSA C22.2 No. 131 Type TECK 90 Cable
- CSA C22.2 No. 2556 & No. 0.3 Wire and Cable Test Methods
- CSA LTGG [-40°C] - as per C68.10 - for Cold Bend and Impact rating
- CSA HL - for Hazardous Locations rating
- CSA SUN RES - for Sunlight Resistant rating
- CSA AG14 - Acid Gas Compliance

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- ICEA S-96-659 (NEMA WC 71) 2001-5000 V Nonshielded Cables
- IEEE 383 Flame Test (70,000 btu)
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- FT1 Flame Test (1,706 BTU/Hr nominal - Vertical Wire Flame Test)

SAMPLE PRINT LEGEND:

SOUTHWIRE [symbol - lightning bolt] #P# CSA LL90458 3/C [AWG 2 to 1000 kcmil] CPT AL TECK 90 TR-XLPE CDRS WITH GROUND 40°C FT4 SUN. RES. AG14 5000V HL YEAR SEQUENTIAL METER MARKS

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand	Diameter Over Conductor	Insul. Thickness	Ground	Inner Jacket Thickness	Dia. Over Armour	Overall Jacket Thickness	Approx. OD	Approx. Weight
	AWG/ Kcmil	No.	inch	mil	No. x AWG	mil	inch	mil	inch	lb/1000ft
669241	2	6	0.268	90	1x6	85	1.565	55	1.675	1031

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Strand count meets minimum number per ASTM
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.

Table 2 – Electrical and Engineering Data

Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Air 90°C
AWG/ Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
2	11.7	1194	0.267	0.321	0.035	135

* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.

Table 3 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Strand	Diameter Over Conductor	Insul. Thickness	Ground	Inner Jacket Thickness	Dia. Over Armour	Overall Jacket Thickness	Approx. OD	Approx. Weight
	AWG/ Kcmil	No.	mm	mm	No. x AWG	mm	mm	mm	mm	kg/km
669241	2	6	6.81	2.29	1x6	2.16	39.75	1.40	42.55	1534

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Strand count meets minimum number per ASTM
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.

Table 4 – Electrical and Engineering Data (Metric)

Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Air 90°C
AWG/ Kcmil	mm	newton	Ω/km	Ω/km	Ω/km	Amp
2	297.18	5313	0.8760	1.05	0.1148	135

* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.

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