AL ARMOR CSA AC90 600V

Copper Conductors 600 Volts RW90 Type AC90

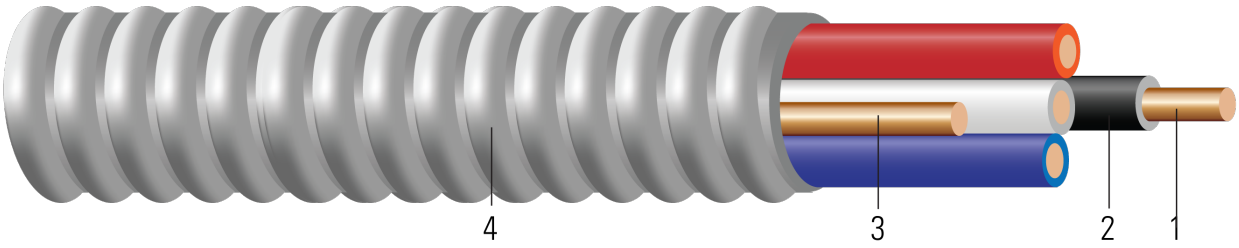

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid copper per ASTM B3
2. **Insulation:** All phases are insulated with Cross-Linked Polyethene (XLPE) RW90
3. **Bond Wire:** Solid copper
4. **Armor:** Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

Southwire's AC90 Cable are designed for exposed and concealed wiring such as ventilated cable trays and other dry locations, where the maximum conductor temperature will not exceed 90°C. Minimum recommended installation temperature: -10°C (with suitable handling procedures).

- Reduces installation costs when compared to pulling separate power and control/signal/data cables
- All cables under one armor decreases the likelihood of damage - eliminating costly callbacks for troubleshooting and repair
- Yellow Stripe Identification - for easy identification when installed with other cables
- CSA 90°C Max. Insulation Temperature rating
- CSA -25°C Cold Temperature Rating
- CSA -10°C Minimum recommended cold Installation Temperature
- Class - C572101 - Control Cables
- CSA Certification File: LL90458 - Certified as ACIC for Control and Instrumentation

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- CSA C22.2 No. 239 Control and instrumentation cables

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Approx. OD	Copper Weight	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	lbs/1000ft	lbs/1000ft
643549	3	3	BK,RD,WE	0.252	7	45	1x8.0	1.038	568	814

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Ampacities based upon 2021 Canadian Electrical Code, Part I (CEC) Table 2 and do not take into account the overcurrent protection limitations in CEC Rule 14-104(2) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding). Also, see CEC Rules 4-004 and 4-006 for additional requirements."

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* Inductive impedance is based on non-ferrous conduit with one diameter spacing.
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	Conductor Number	Min. Bend Radius	Max Pull Tension	DC Resistance at 25°C	AC Resistance at 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
3	3	5.2	1262	0.205	0.254	0.047	100	115

* Ampacities based upon 2021 Canadian Electrical Code, Part I (CEC) Table 2 and do not take into account the overcurrent protection limitations in CEC Rule 14-104(2) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding). Also, see CEC Rules 4-004 and 4-006 for additional requirements."
* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.

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