



# AL ARMOR CSA AC90 600V

Copper Conductors 600 Volts T90 PVC / Nylon 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 Polyvinyl Chloride with Nylon Sheath Type T90 Nylon
3. **Signal:** 16 AWG Copper Insulated Singles Pink, Purple. Overall light blue jacket over the signal cables
4. **Binder:** Polypropylene tape
5. **Bond Wire:** Solid copper
6. **Armor:** Aluminum Interlocked Armor

## APPLICATIONS AND FEATURES:

Southwire's new ACIC-PCS DUO™ Cable is ideal for use with LED or fluorescent dimming controls in multi-residential and SMART buildings. ACIC-PCS DUO™ Cable combines power conductors along with Control/Signal applications all under one armor, saving you time and money. ACIC-PCS DUO™ cables are also 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

## SAMPLE PRINT LEGEND:

SOUTHWIRE {CSA} LL90458 X/C AWG XX CU PVC/N AND AWG XX CU X/C PVC/N CONTROL -25°C FT1, FT4 SUN RES 90°C DRY 75°C WET 600V ACIC --- SOUTHWIRE ACIC-PCS DUO{TM} ---

**Table 1 – Weights and Measurements**

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Diameter Over Armor	Approx. OD	Copper Weight	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	inch	lbs/1000ft	lbs/1000ft
10 AWG   Solid											
552230	10	2	BK,WE	0.101	Solid	30	1x12	0.527	0.527	82	148

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."

\* 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 60°C	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/Kcmil		Inches	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
10 AWG   Solid									
10	2	3.7	166	1.04	1.253	0.05	30	35	40

\* 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.

