Power & Control/Signal Type ACIC CSA

Power & Control/signal, Copper Conductors, 12 & 10 AWG - Power, 16 AWG - Jacketed Control/signal, 600 Volts / -25°c Min, 90°C Max, T90 PVC / Nylon Construction
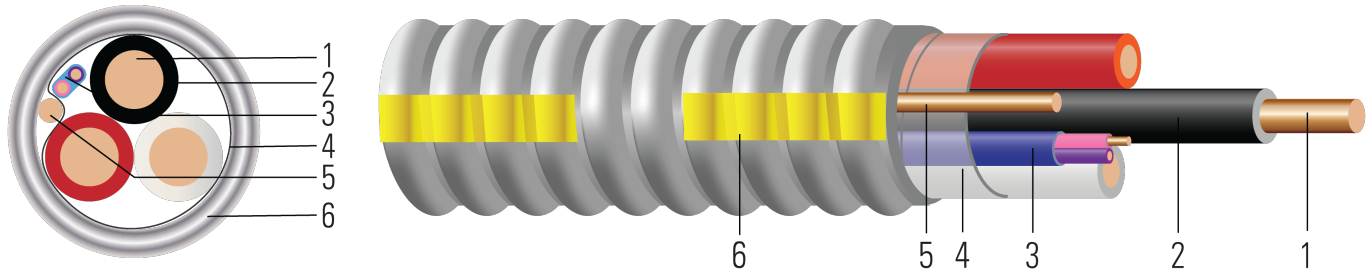

Image not to scale. See Table 1 for dimensions.

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	Cond. Number	Strand	Diameter Over Insulation	Insul. Thickness	Dia. Over Armour	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C†
	AWG/Kcmil		No.	inch	mil	inch	lb/1000ft	inch	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
643479◊	10	2	Solid	0.151	35	0.602	197	4.2	1.040	1.253	0.0307	40

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.

Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Cond. Number	Strand	Diameter Over Insulation	Insul. Thickness	Dia. Over Armour	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C
	AWG/Kcmil		No.	mm	mm	mm	kg/km	mm	Ω/km	Ω/km	Ω/km	Amp
643479◊	10	2	Solid	3.84	0.89	15.29	293	106.68	3.41	4.11	0.1007	40

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.