



Product Data

A/AN Series
A/CP Series
A/3K Series
A/1.8K Series
A/20K Series
 Temperature Sensor

Product Description

The A/10K-AN (Type III), A/10K-CP (Type II), A/3K, A/1.8K and A/20K Series temperature sensors are thermistor type sensors. These sensors provide a predictable output over a specified temperature range to meet each manufacturer's required input values. (See www.workaci.com for complete curve chart specifications)

These units are offered in Room, Room with Setpoint, Room with Override, Room with Setpoint and Override, and Room w/ Setpoint, Override, and RJ11 Jack, Stainless Steel Duct and Duct without Box, Immersion, Stainless Plate, Raw, Bendable Copper and Stainless Steel Rigid Averaging, Strap-On, Bullet Probe, Button Sensor, and Outdoor Air Configurations.

All ACI Room sensors may be ordered with an optional setpoint (see chart on the following page), override, or with a 4 pin RJ11 or 6 pin RJ12 communication jack with terminal blocks, for remote programming. These units are also available with a 1/8" RS232 Stereo Jack.

These products are covered by ACI's Five (5) Year Limited Warranty, which is located in the front of ACI'S SENSORS & TRANSMITTERS CATALOG or can be found on ACI's web site, which is: www.workaci.com.

Product Specifications

Sensor Output	10K Ohms @ 77°F (25°C) Type III 10K Ohms @ 77°F (25°C) Type II 3K Ohms @ 77°F (25°C) 1.8K Ohms @ 77°F (25°C) 20K Ohms @ 77°F (25°C)
Accuracy (0 to 70°C)	+/-0.2°C (+/-0.36°F)
Stability	+/- 0.13°C (0.23°F)
Operating Temperature Range	-40 to 302°F (-40 to 150°C)
Operating Humidity	0 to 90% RH non-condensing
Interchangeability	+/- 0.2°C (+/-0.36°F)
Power Dissipation Constant	3 mW / °C
For sensors with Display option, see LCD Series Temp display cut sheet	

Thermistor



Attributes

- Offer high accuracy and interchangeability over a wide temperature range.
- Higher resistance output relative to Platinum RTD's
- Non-polarity sensitive
- CE approval for thermistors except for:
 - Averaging sensors
 - LCDs and units that have leads longer than 3 meters

Applications

- OEM / Industrial
- Light Industrial
- DDC Systems



Made in the USA

Automation Components, Inc.
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 Middleton, WI 53562
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Wiring Diagrams available at www.workaci.com

TEMPERATURE

RELATIVE HUMIDITY

PRESSURE

CURRENT

GAS SENSORS

ACCESSORIES

INTERFACE DEVICES

Ordering Information

AN=type III
CP=type II

A/AN, A/CP, A/3K, A/1.8K or A/20K (choose configuration below)

-Configuration	-Length	-Enclosure Type	-Optional Plenum Wire
D (Duct)	4", 8", 12", 18"	PB, GD, BB, 4X, EH	
DO (Duct without Box)	4", 8", 12", 18"	-----	6'CL2P, 10'CL2P, 20'CL2P
I (Immersion w/ well)	2.5", 4", 6"	PB*, GD, BB, 4X, EH	
INW (Immersion no well)	2.5", 4", 6"	PB*, GD, BB, 4X, EH	
A (Copper Averaging)	8', 12', 24'	PB, GD, BB, 4X, EH	
FA (Flex. Cable Averaging)	8', 12', 24'	PB, GD, BB, 4X, EH	
RA (Rigid Averaging)	18", 24", 36"	PB, GD, BB, 4X, EH	
S (Strap)	-----	PB*, GD, 4X	
O (Outdoor Air)	-----	EH, BB, 4X	
SP (Stainless Plate)			
W (Raw Potted Sensor)			
W-6' (Raw w/ 6' Leads)			
BP (Bullet Probe)			
BP-20'Z (BP w/20' of Zip Wire)			
BBS (Brass Button Sensor)			
SBS (Stainless Button Sensor)			
PBS (Plastic Button Sensor)			

Enclosure Key

PB = Plastic Box
GD = Galvanized Box
BB = NEMA 3R
4X = NEMA 4X
EH = Euro Housing (Weather tight)

*Please note that the -PB (Plastic Box) is rated to 140° F and may not be suitable for high temperature applications.

Example: A/AN-D-4"-PB

Room configurations:

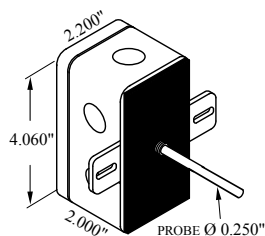
Configuration	Communication Jack	Pot Value*	Setpoint Indicator*	Pot Action*
R2 (Room)	RJ4 (4 Pin RJ11)	400 5K	Cool Warm	DA (Direct)
R2S* (Room w/ Setpoint)	RJ6 (6 Pin RJ12)	1K 8.5K	55 to 85	RA (Reverse)
R2O (Room w/ Override)	RS232 (Stereo Jack)	2K 10K	10 to 30°C	
R2SO* (Room w/ Setpoint & Override)		3K 20K		
		100K		

Room Sensors with* require setpoint specs (value, indication, and action) and are not listed on your packing slip or invoice.

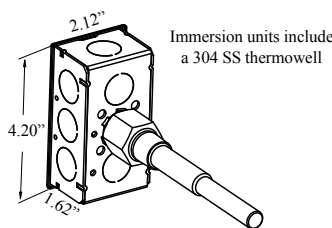
R2= New Aries Enclosure OR **R=** Previous Infinity Enclosure (Please contact ACI for display options)

Example: A/AN-R2SO- 10K- Cool/Warm-DA or A/CP-R

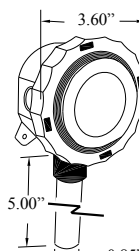
Standard enclosure defaults:



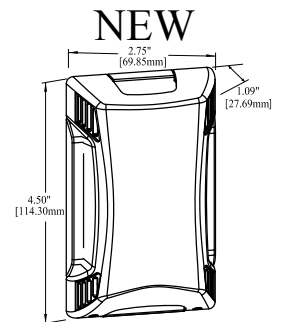
Duct
(Plastic Box)



Immersion
(Galvanized Box)



Outdoor Air
(Euro Enclosure)



Room

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