



Product Data

A/100 Series A/1K Series

Platinum RTD Temperature
Sensors

Product Description

The A/100 and A/1K Series temperature sensors incorporate a Class A, Thin Film Platinum RTD sensor which conforms to DIN-IEC-751 platinum RTD standards. These sensors are available in either two or three-wire configurations, incorporating high accuracy and interchangeability throughout a wide operating temperature range.

These units are offered in Room, Room with Set Point, Room with Override, Room with Setpoint and Override, and Room with Setpoint, Override, and RJ11 Jack, Stainless Steel Duct and Duct without Box, Immersion, Stainless Plate, Raw, Bendable Copper / Continuous Element and Stainless Steel Rigid Averaging, Strap-On, Bullet Probe 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.

All ACI Temperature Sensors have a limited five year warranty.

Product Specifications

Output	100 Ohms @ 32°F (0°C) 1K Ohms @ 32°F (0°C)
Accuracy	+/- 0.06% @ 32°F (0°C) Single Point +/- 1.0 Ohm @ 70°F (Averaging)
Stability	less than +/- 0.1°C drift
Repeatability	+/-0.2°C (+/-0.36°F)
Operating Temp Range: Single Point	-58 to 392°F (-50 to 200°C)
Continous Element Averaging	-50 to 275°F (-45.5 to 134.8°C)
Temp. Coefficient	0.00385 Ohm/Ohm/°C
Standardization	DIN-IEC-751(formerly DIN 43760)
Resistance Characteristics	+/- 0.06% Class A (Standard) +/- 0.12% Class B (Averaging)
For sensors with Display option, see the LCD Series cut sheet	

RTD



Attributes:

- Double Potting Process to avoid Moisture Issues
- European enclosure for outside air
- Class A Standard exceeds most specifications
- Four-way Airflow design for wall mount
- Can be used with a transmitter to provide a 4 to 20mA signal
- Continuous Element Averaging Sensors

Applications:

- DDC Systems
- Refrigeration Systems
- OEM / Industrial
- Light Industrial



Made in the **USA**

Automation Components, Inc.

2305 Pleasant View Rd.
Middleton, WI 53562
PH: (608) 831-2585
FAX: (608) 831-7407

Wiring Diagrams available at www.workaci.com/instructions.htm
C0000100 Rev 1.pdf

DISPLAYS

TEMPERATURE

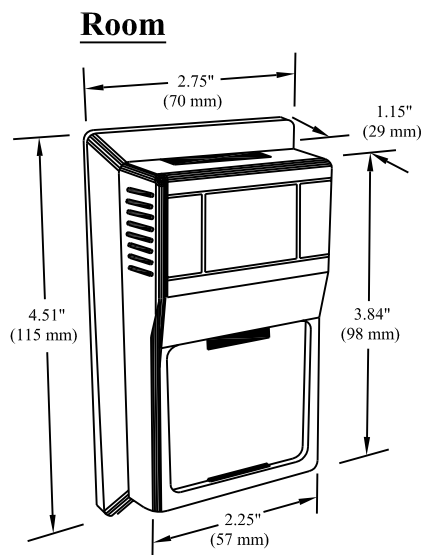
RELATIVE HUMIDITY

PRESSURE

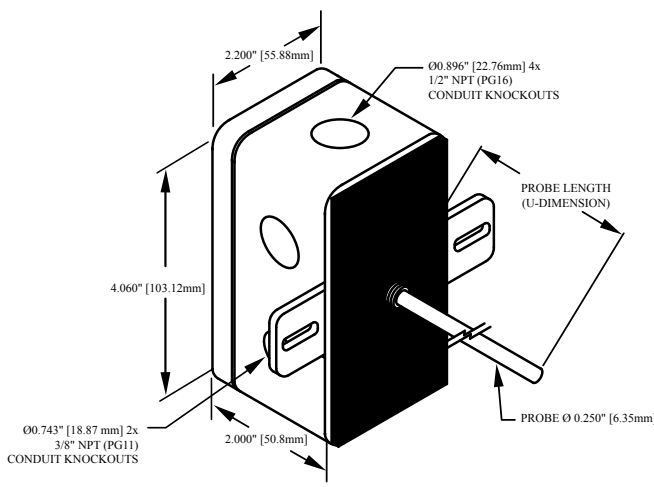
CURRENT

AIR QUALITY

ACCESSORIES

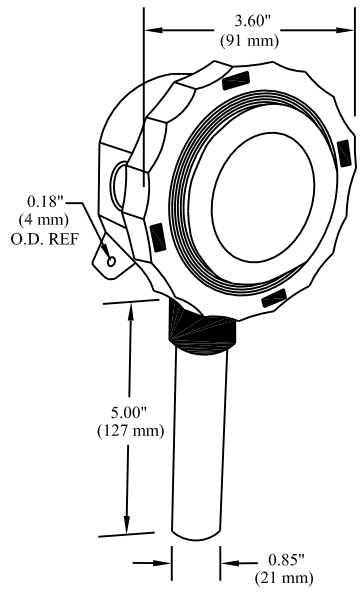


Duct /Averaging / Rigid Averaging

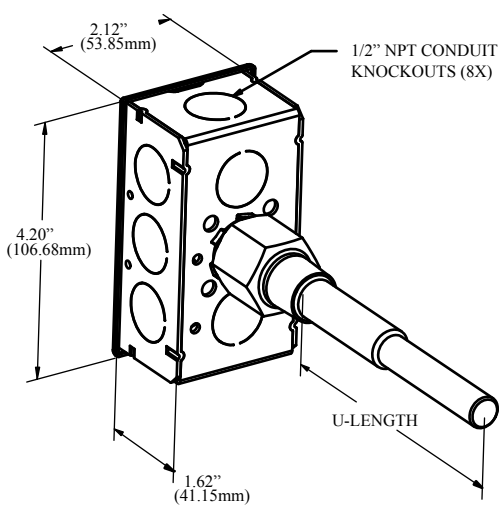


- Duct Insertion (U-Dimension)**
 5.5" (89 mm)
 7.5" (191 mm)
 11.5" (292 mm)
 17.5" (445 mm)
- Averaging**
 8' (2.4 m)
 12' (3.7 m)
 24' (7.3 m)
- Rigid Averaging**
 17.625" (448mm)
 23.625" (600 mm)
 35.625" (905mm)

Outside Air



Immersion³



- Well Insertion (U-Length)**
 2.50" (64 mm)
 4.00" (102 mm)
 6.25" (158.75 mm)

Ordering Information

Sensor # Wires	Configuration	Communication Jack ¹	Pot Value ¹	Setpoint Indicator ¹	Pot Action ¹	Display ¹	Housing Type ²
A/ -	-	-	-	-	-	-	-
100	R - Room	RJ4 (4 Pin RJ11)	400	Cool Warm	DA (Direct)	() No Display	(PB) Plastic Housing
1K	RS - Room w/ Setpoint	RJ6 (6 Pin RJ12)	1K	55 to 85	RA (Reverse)	(Standard)	(Standard)
	RO - Room w/ Override	RS232 (Stereo Jack)	2K	10 to 30° C		(DF) LCD Display	(GD) Galvanized
	RSO - Room w/ Setpoint & Override		3K			(Degrees F)	(BB) NEMA 3R
	D - Duct 4", 8", 12", 18", 24"		5K			(DC) LCD Display	(4X) NEMA 4X
	DO - Duct without box 4", 8", 12", 18"		8.5K			(Degrees C)	(EH) Euro
	I - Immersion ³ 2.5", 4", 6"		10K				
	A - Bendable Copper Averaging 12', 24'		20K				
	RA - Rigid Averaging 18", 24", 36"		100K				
	S - Strap On ³						
	O - Outdoor Air						
	SP - Stainless Plate						
	BP - Bullet Probe						
	W - Raw						
	W-6" - Raw Sensor w/6"Leads						
	BBS - Brass Button Sensor						
	SBS - Stainless Button Sensor						

¹These Options are only available on ACI's Room Configurations. Resistors are available in series with pot values listed above. Contact ACI for details.

²Duct, Bendable Copper and Rigid Averaging come standard w/ plastic boxes. Optional enclosures include NEMA 3R (BB), NEMA 4X (4X) or the Galvanized Junction Box (GD).

³Immersion and Strap-On sensors come standard with the galvanized junction box. (The plastic enclosure is also available but is rated for applications below 140 degrees F) Additional enclosures include NEMA 3R (BB) or NEMA 4X (4X) for immersion and NEMA 4X (4X) for Strap On.

2305 Pleasant View Rd. Middleton Industrial Park Middleton, WI 53562

PH: (608) 831-2585 FAX: (608) 831-7407