

Automation Components, Inc.

## TEMPERATURE | PLATINUM RTDS | WALL PLATES



## WALL PLATES Stainless & Aluminum Wall Plate, Platinum RTD

The ACI Platinum Wall Plate Series features a decorative Stainless Steel or Aluminum wall plate with two or three Teflon colored lead wires to differentiate between the different sensor types. All three-wire "-3W" sensors should be ordered when using with a 3-Wire temperature transmitter or sensor configuration on your building management system or PLC (Programmable Logic Controller). The purpose of the 3rd wire is to compensate for external lead wire resistance that will affect the accuracy of your sensor. ACI recommends the use of 18 AWG lead wires to reduce the effect of external lead wire resistance when using a Platinum RTD. The sensors in this series are manufactured using ACI's double encapsulation process to eliminate the effects of moisture upon the sensors and to increase the thermal response using

our high quality, thermally conductive epoxy. A foam pad is included to insulate the sensor from thermal drafts within the wall. All wall plates are will provide a level of security and protection to the sensor when mounted over a single gang junction box or hole in the wall with the use of drywall anchors. Tamper Proof mounting screws, screw driver bits and NIST Certificates are available as referenced on the back of the data sheet. Other options including override and communication jacks may be available upon request.

Applications: Ambient Air/Space Temperature Sensing, Tamper Proof/Secure Applications, Schools, Gymnasiums, Office Buildings, Hallways

The ACI Platinum Wall Plate Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

## **PRODUCT SPECIFICATIONS**

CF

X

Ð

Sensor Type   Sensor Curve:	Platinum RTD   PTC (Positive Temperature Coefficient)
Number Sensing Points:	One
Number Wires:	A/100-2W-xP Series and A/1K-2W-xP Series: Two (Non-Polarity Sensitive)
	A/100-3W-xP Series and A/1K-3W-xP Series: Three (Polarity Sensitive)
Sensor Output @ 0°C (32°F):	A/100-xW-xP Series: 100 Ohms nominal   A/1K-xW-xP Series: 1000 Ohms nominal
Sensor Accuracy @ 0°C (32°F):	+/- 0.06% Class A ( <b>Tolerance Formula:</b> +/- °C = (0.15°C + (0.002 *  t ))
	where $ t $ is the absolute value of Temperature above or below 0°C in °C)
	-40°C (-40°F): +/- 0.23°C (+/- 0.414°F)   0°C (32°F): +/- 0.15°C (+/- 0.27°F)
	<b>71°C (160°F):</b> +/- 0.292°C (+/- 0.53°F)
Din Standard   Temperature Coefficient:	DIN EN 6075 (IEC 751)   3850 ppm / ℃
Sensor Stability:	+/- 0.03% after 1000 Hours @ 300°C (572°F)
Response Time (63% Step Change):	25 Seconds nominal
Self-Heating   Maximum Operating Current:	100 Ohm RTD: 7 mW/°C (Still Air)   5 mA   1K Ohm RTD: 4mW/°C (Still Air)   3 mA
Operating   Storage Temperature Range:	-40 to 71ºC (-40 to 160ºF)
Operating Humidity Range:	10 to 95% RH, non-condensing
Plate Material:	A/100/1K-SP Series: 430 Stainless Steel (Brushed Stainless Steel Finish)
	A/100/1K-AP Series: Aluminum (Smooth Satin Finish, Clear Anodized)
Foam Material   Flammability Rating:	Cross-Linked Polyethylene   FMVSS-302
Lead Length   Conductor Size:	14" (35.56cm)   22 AWG (0.65mm)
Lead Wire Insulation   Wire Rating:	Etched Teflon (PTFE) Colored Leads   MIL-W-16878/4 (Type E)
Conductor Material:	Silver Plated Copper
Product Dimensions (L x W x D):	4.50" (114.3mm) x 2.78" (70.6mm) x 0.187" (4.76mm)
Product Weight:	A/100/1K-SP Series: 0.15 lbs. (68.04g)   A/100/1K-AP Series: 0.09 lbs. (40.82g)
Agency Approvals:	CE, RoHS2, WEEE

## TEMPERATURE | PLATINUM RTDS | WALL PLATES

Automation Components, Inc.

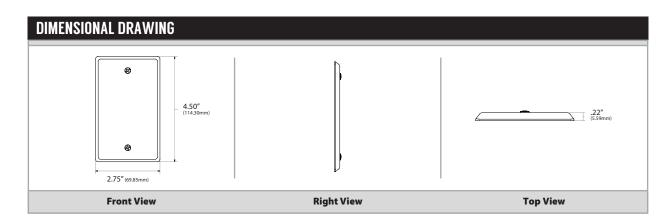


X

20)

COMPLIAN

CE



STANDARD ORDERING Model # Example: A/100-2W-SP -OR- 119979		
Model #	ltem #	Description
A/100-2W-SP	119979	100 Ohm RTD, 2-Wire, Stainless Wall Plate, 14" Brown/Brown Leads, 1/8" Foam Pad
A/100-3W-SP	120059	100 Ohm RTD, 3-Wire, Stainless Wall Plate, 14" Brown/Brown/Black Leads, 1/8" Foam Pad
A/1K-2W-SP	120368	1K Ohm RTD, 2-Wire, Stainless Wall Plate, 14" Black/Black Leads, 1/8" Foam Pad
A/1K-3W-SP	142479	1K Ohm RTD, 3-Wire, Stainless Wall Plate, 14" Black/Black/White Leads, 1/8" Foam Pad

CUSTOM ORDERING	Model # Example: A/ 100 2W SP NIST A. B. C. D. E.	MODEL #
A. Sensor Series No Selection Required	A/	<b>A</b> /
B. Model Series Select One (1)	100 = 100 Ohm Platinum RTD   1K = 1K Ohm Platinum RTD	
C. Number of Wires Select One (1)	2W = Two Wires   3W = Three Wires	
<b>D. Configuration</b> Select One (1) <b>SP</b> = 1 Gang Stainless Steel Wall Plate   <b>AP</b> = 1 Gang Aluminum Wall Plate		
E. NIST Select One (1)	= No NIST Certificate   <b>NIST</b> = NIST Certificate (Must Specify 1, 3 or 5 Points)	

ACCESSORIES ORDERING Model # Example: A/TAMPER PROOF SCREWS -OR-		
Model #	ltem #	Description
A/TAMPER PROOF SCREWS	144865	Two (2) Screws, Tamper Proof, #6 x 5/8", Zinc Plated, Flat Head, 1/8"
SCREWDRIVER INSERT BIT	143067	Screwdriver Bit, Tamper Proof Screw, 5/64