## TEMPERATURE | THERMISTORS | ROOM



## **Mount Enclosures, Thermistor**

The ACI Thermistor Room Series combines option flexibility with attractive styling in our "-R2" or "-R" style enclosures which include four-way air flow design too minimize self-heating to the sensor. These enclosures are offered in a White "-R2" or Beige "-R" color depending on the enclosure style. These units are designed to be mounted over a single gang junction box or hole in the wall using drywall anchors. Screw terminal blocks are available for making all connections to your building management system (network). An optional 1/8" Black foam pad with pressure sensitive adhesive is available to insulate the sensor from thermal drafts within the wall or wall surface. A 1/16" Hex driver is needed to secure the cover from being easily removed. The "LCD" option uses two temperature sensors to monitor the ambient air temperature in the space and is factory calibrated at a single point.

Applications: Space Temperature Sensing, Decorative Wall Sensor Applications, Office Buildings, Schools, Colleges, Commercial Buildings, OEM

The ACI Thermistor Room 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.

Sensor Type   Sensor Curve:	Thermistor   Non-Linear, NTC (Negative Temperature Coefficient)		
Number Temperature Sensing Points:	One		
Sensor Output @ 25°C (77°F):	A/1.8K Series: 1.8KΩ nominal	A/CP Series (Type II): 10KΩ nominal	
	A/3K Series: 3KΩ nominal	A/CSI Series: 10KΩ nominal	
	<b>A/AN Series (Type III):</b> 10KΩ nominal	A/10KS Series: 10KΩ nominal	
	<b>A/AN-BC Series:</b> 5.238KΩ nominal	<b>A/10K-E1 Series:</b> 10KΩ nominal	
	A/20K Series: 20KΩ nominal	A/100KS Series: 100KΩ nominal	
Accuracy 0-70°C (32-158°F):	+/-0.2°C (+/-0.36°F) except <b>A/10K-E1 Series:</b> +/-0.3°C (+/-0.54°F)		
	<b>A/1.8K Series:</b> +/-0.5°C @ 25°C (77°F) and +/-1.0°C (+/-1.8°F)		
Stability:	Sensor Dependent; Contact ACI for more information on specific sensor		
Response Time (63% Step Change):	10 Seconds nominal		
Power Dissipation Constant:	3 mW/°C except <b>A/1.8K Series:</b> 1 mW/°C   <b>A/10K-E1 Series:</b> 2 mW/°C		
LCD Display Supply Voltage:	+9 to 35 VDC / 24 VAC (50/60 Hz)		
LCD Display Supply Current/VA:	< 4 mA / 0.12 VA		
LCD Display Accuracy:	+/- 2°F or +/- 2°C @ 71°F (21.5°C) Typical		
LCD Display Descriptor:	°F (Fahrenheit) or °C (Celsius)		
LCD Display Life Expectancy:	50,000 Hours Minimum		
Set Point Specifications   Set Point Indication:	See Ordering Grid options on back of Prod	uct Data Sheet	
Set Point Tolerance:	+/- 10% of Range		
Override Option:	Short Thermistor (Default); Field (Jumper) Selectable "Dry Contact" Closure (Separate Input);		
	Short Set Point available upon request		
Operating   Storage Temperature Range:	1.5 to 50°C (35 to 122°F)   <b>Non-LCD:</b> -40 to 65°C (-40 to 149°F), <b>LCD Display:</b> -10 to 65°C (14 to 149°		
Operating Humidity Range:	10 to 95% RH, non-condensing		
Connections   Wire Size:	Screw Terminal Blocks   16 (1.31 mm²) to 26 (0.129 mm²) AWG		
Terminal Block Torque Rating:	0.5 Nm (Minimum); 0.6 Nm (Maximum)		
LCD Supply Voltage:	+12 to 36 VDC or 24VAC Nominal 50/60 HZ		
LCD Descriptor   Number of Digits:	°F (Fahrenheit) or °C (Centigrade)   3 42 Segment Display		
Enclosure Material   Color:	"-R2" Enclosure: ABS; Plastic, White, UL94-HB   "R" Enclosure: ABS Plastic, Beige UL94-HB		
Product Dimensions:	See Drawing on back of Product Data Sheet		
Product Weight:	<b>A/XX-R/RS/RO Series:</b> 0.14 lbs. (63.5g)   <b>A/XX-RSO Series:</b> 0.18 lbs. (81.6g)		
	<b>A/XX-R2/R2S/R2O Series:</b> 0.16 lbs. (72.6g)   <b>A/XX-R2SO Series:</b> 0.20 lbs. (90.7g)		
	All LCD Display Units: 0.18 lbs. (81.6g)		
Agency Approvals:	CE**, RoHS2, WEEE		

Note\*\*: All LCD Display Units are not CE Compliant, but they are RoHS2 Compliant







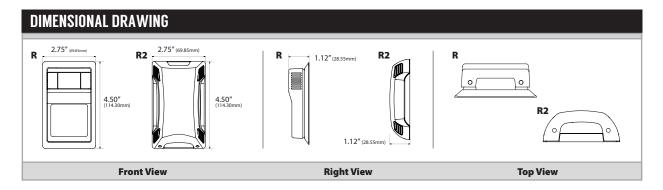




## **Automation Components, Inc.**

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STANDARD ORDERING Model # Example: A/CP - OR 14421		
Model #	Item #	Description
A/CP-R	144212	10K (Type II), "R" Version, Beige, No Options
A/CP-R2	144213	10K (Type II), "R2" Version, White, No Options
A/AN-R	144208	10K (Type III), "R" Version, Beige, No Options
A/AN-R2	144209	10K (Type III), "R2" Version, White, No Options
A/20K-R	144160	20K, "R" Version, Beige, No Options
A/20K-R2	144170	20K, "R2" Version, White, No Options

A. Sensor Series No Selection Required	A/			
B. Model Series Select One (1)	1.8K   3K   AN   AN-BC   CP   CSI   10KS   10K-E1   20K   100KS			
C. Configuration Select One (1)	R = Room   RO = Room with Override   RS = Room with Set Point RSO = Room with Set Point and Override   R2 = Room   R2O = Room with Override R2S = Room with Set Point   R2SO = Room with Set Point and Override			
D. Communication Jack Select One (1)	= No Jack RJ4 = 4 Pin 4 Conductor RJ9, RJ10, or RJ22 Style Head Set Modular Connector RJ6 = 6 Pin 6 Conductor RJ12 Modular Phone Connector RS232 = 3.5mm (1/8") Stereo Jack			
E. LCD Display Select One (1)	= No LCD Display   <b>LCD</b> = With LCD Display (Only Available with "R" Style Enclosure)			
F. LCD Display Descriptor Select One (1)	<b>F</b> = °F (Fahrenheit)   <b>C</b> = °C (Celcius)			
G. NIST** Select One (1)	= No NIST Certificate   <b>NIST</b> = NIST Certificate (Must Specify 1, 3 or 5 Points)			
Setpoint Configuration Options Select	Options below if RS, RSO, R2S or R2SO was selected as a Configuration (C).			
1. Offset Resistor Select One (1)	0 Ohm   51.1 Ohm   200 Ohm   499 Ohm   750 Ohm   806 Ohm   910 Ohm 1.00K   2.00K   2.37K   2.49K   4.75K   4.99K   6.19K   7.32K   8.25K   10K   20K			
2. Potentiometer Select One (1)	400 Ohm   1K Ohms   2K Ohms   5K Ohms   8.5K Ohms   10K Ohms 20K Ohms   100K Ohms			
3. Setpoint Direction Select One (1)	DA = Direct Acting (Left to Right (Smaller to Larger)) RA = Reverse Acting (Left to Right (Larger to Smaller))			
4. Setpoint Indication Select One (1)	+ to -   Blue   Red   Cool   Warm   Cooler   Warmer   10 to 30C   18 to 28C   55 to 85F			
5. Override Options Select One (1)	SS = Short Sensor (Default)*   DC = Dry Contact (Separate Input)			

Note 1: LCD Display is not compatible with NIST | Note\*: Short Sensor is our default but the Dry Contact option is field selectable with terminals included Note\*: NIST is available in "R" and "R2" only configurations

ACCESSORIES ORDERING Model # Example: A/MOUNTING PLATEBEIGER -OR- 10682		
Model #	Item #	Description
A/MOUNTING PLATE BEIGE R	106821	Wall Mounting Back Plate, Plastic, Beige ("R")
A/MOUNTING PLATE WHITE R	126386	Wall Mounting Back Plate, Plastic, White ("R")
A/MOUNTING PLATE WHITE R2	143369	Wall Mounting Back Plate, Plastic, White ("R2")
LOCKING COVER	107370	Clear Thermostat Guard, Locking Cover, Low Profile
A/ROOM-FOAM-PAD	125690	1/8" Foam Insulation Pad with Adhesive (3" x 2", Black)







