



ROOM

Wall 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 to 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 Opportunities

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.

PRODUCT SPECIFICATIONS

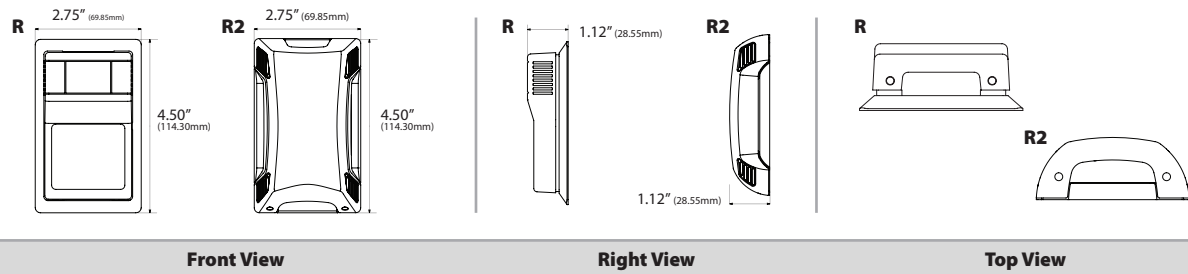
Sensor Type Sensor Curve:	Thermistor Non-Linear, NTC (Negative Temperature Coefficient)
Number Temperature Sensing Points:	One
Sensor Output @ 25°C (77°F):	A/1.8K Series: 1.8KΩ nominal A/3K Series: 3KΩ nominal A/AN Series (Type III): 10KΩ nominal A/AN-BC Series: 5.238KΩ nominal A/20K Series: 20KΩ nominal A/CP Series (Type II): 10KΩ nominal A/CSI Series: 10KΩ nominal A/10KS Series: 10KΩ nominal A/10K-E1 Series: 10KΩ nominal A/50K: 50KΩ nominal (Brown/Yellow) A/100KS Series: 100KΩ nominal
Accuracy 0-70°C (32-158°F):	+/- 0.2°C (+/- 0.36°F) except A/10K-E1 Series: +/- 0.3°C (+/- 0.54°F) A/1.8K Series: +/- 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 A/1.8K Series: 1 mW/°C A/10K-E1 Series: 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 Number of Digits:	°F (Fahrenheit) or °C (Celsius) 3 1/2 Segment Display
LCD Display Life Expectancy:	50,000 Hours Minimum
Set Point Specifications Set Point Indication:	See Ordering Grid options on back of Product 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) Non-LCD: -40 to 65°C (-40 to 149°F), LCD Display: -10 to 65°C (14 to 149°F)
Operating Humidity Range:	10 to 95% RH, non-condensing
Connections Wire Size:	Screw Terminal Blocks 16 (1.31 mm ²) to 26 (0.129 mm ²) AWG
Terminal Block Torque Rating:	0.5 Nm (Minimum); 0.6 Nm (Maximum)
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:	A/XX-R/RS/RO Series: 0.14 lbs. (63.5g) A/XX-R5O Series: 0.18 lbs. (81.6g) A/XX-R2/R2S/R2O Series: 0.16 lbs. (72.6g) A/XX-R2SO Series: 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





DIMENSIONAL DRAWING



STANDARD ORDERING

Model # Example: A/CP -OR- 144212

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

CUSTOM ORDERING

Model # Example: A/ 1.8K RS RJ6 LCD F 0 Ohm 1k Ohms DA Cool/Warm DC

MODEL #

A. Sensor Series No Selection Required	A/ →	A/
B. Model Series Select One (1)	1.8K 3K AN AN-BC CP CSI 10KS 10K-E1 20K 50K 100KS	
C. Configuration Select One (1)	R = Room RO = Room with Override RS = Room with Set Point R5O = Room with Set Point and Override R2 = Room R2O = Room with Override R2S = Room with Set Point R25O = 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 LCD = With LCD Display (Only Available with "R" Style Enclosure)	
F. LCD Display Descriptor Select One (1)	F = °F (Fahrenheit) C = °C (Celsius)	
G. NIST** Select One (1)	---- = No NIST Certificate NIST = NIST Certificate (Must Specify 1, 3 or 5 Points)	
Setpoint Configuration Options Select Options below if RS, R5O, R2S or R25O 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 PLATE BEIGE R -OR- 106821

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)

