



ROOM

Wall Mount Enclosures, Nickel RTD

The ACI Nickel Room Series combines option flexibility with attractive styling in our “R2” or “R” style enclosures which both 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. All units are designed to be mounted over a single gang junction box or hole in the wall with the use of drywall anchors. Screw terminal blocks are provided for making all connections to the temperature sensor, Set Point, “After Hours” Override, and Communication Jacks for easy access to your building management system. 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 temperature. A 1/16” Hex driver should be used 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 Nickel Room 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

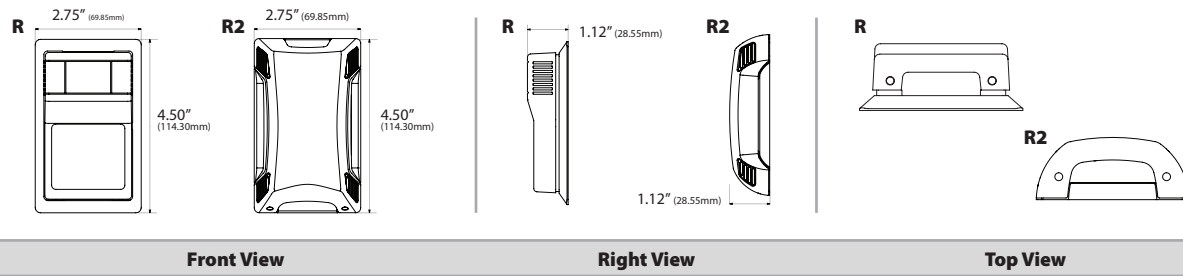
Sensor Type Sensor Curve:	Nickel RTD PTC (Positive Temperature Coefficient)
Number Temperature Sensing Points:	One
Sensor Output @ 21.1°C (70°F):	1000 Ohms Nominal
Sensor Accuracy:	0°C (32°F): +/- 0.4°C (+/- 0.72°F) 21.1°C (70°F): +/- 0.17°C (+/- 0.34°F) 54.4°C (130°F): +/- 0.56°C (1.00°F)
Din Standard Temperature Coefficient (0-100°C):	Din 43760 6370 ppm/°C
Sensor Stability:	+/- 0.05% after 1000 Hours @ 150°C (302°F)
Response Time (63% Step Change):	8 Seconds nominal
Self-Heating Maximum Operating Current:	0.3°C/mW (Still Air) 5 mA
LCD Display Supply Voltage:	+9 to 35 VDC / 24 VAC (50/60 Hz)
LCD Display Supply Current/VA:	< 4 mA / 0.12VA
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 Product Data Sheet
Set Point Tolerance:	+/- 10% of Range
Override Option:	Short Thermistor (Default); Field (Jumper) Selectable “Dry Contact” Closure Short Set Point available upon request
Operating Temperature Range:	1.5 to 50°C (35 to 122°F)
Storage Temperature Range:	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 (Non-Polarity Sensitive) 16 AWG (1.31 mm ²) - 26 AWG (0.12 mm ²)
Terminal Block Torque Rating:	0.5 Nm (Minimum); 0.6 Nm (Maximum)
Enclosure Material Flammability Rating Color:	“R2” Enclosure: ABS Plastic; UL94-HB, White “R” Enclosure: ABS Plastic; UL94-HB, Beige
Product Dimensions:	See Drawing on back of Product Data Sheet
Product Weight:	A/1K-NI-R/RS/RO Series: 0.14 lbs. (63.5g); A/1K-NI-R50 Series: 0.18 lbs. (81.6g) A/1K-NI-R2/R2S/R2O Series: 0.16 lbs. (72.6g); A/1K-NI-R250 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: **1K-NI-R2** -OR- **144153**

Model #	Item #	Description
A/1K-NI-R	144152	1K Nickel RTD, "R" Version, Beige, No Options
A/1K-NI-R2	144153	1K Nickel RTD, "R2" Version, White, No Options

CUSTOM ORDERING

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

MODEL #

A. Sensor Series <i>No Selection Required</i>	A/ _____ →	A/
B. Model Series <i>Select One (1)</i>	1K-NI _____ →	1K-NI
C. Configuration <i>Select One (1)</i>	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 <i>Select One (1)</i>	---- = 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 <i>Select One (1)</i>	---- = No LCD Display LCD = With LCD Display (<i>Only Available with "R" Style Enclosure</i>)	
F. LCD Display Descriptor <i>Select One (1)</i>	F = °F (Fahrenheit) C = °C (Celsius)	
G. NIST** <i>Select One (1)</i>	---- = No NIST Certificate NIST = NIST Certificate (Must Specify 1, 3 or 5 Points)	
Setpoint Configuration Options <i>Select Options below if RS, RSO, R2S or R2SO was selected as a Configuration (C).</i>		
1. Offset Resistor <i>Select One (1)</i>	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 <i>Select One (1)</i>	400 Ohm 1K Ohms 2K Ohms 5K Ohms 8.5K Ohms 10K Ohms 20K Ohms 100K Ohms	
3. Setpoint Direction <i>Select One (1)</i>	DA = Direct Acting (Left to Right (Smaller to Larger)) RA = Reverse Acting (Left to Right (Larger to Smaller))	
4. Setpoint Indication <i>Select One (1)</i>	+ to - Blue Red Cool Warm Cooler Warmer 10 to 30C 18 to 28C 55 to 85F	
5. Override Options <i>Select One (1)</i>	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)

