



Automation Components, Inc.

TEMPERATURE | PLATINUM RTDS | ROOM



ROOM

Wall Mount Enclosures, Platinum RTD

The ACI Platinum Room Series combines 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 enclosure style and designed to be mounted over a single gang junction box or hole in the wall using drywall anchors. An optional LCD Display is available in the Beige “-R” style enclosure. Screw terminal blocks are provided for making connections 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 can 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, Office Buildings, Schools, Colleges, Commercial Buildings, OEM Opportunities

The ACI Platinum 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: | Platinum RTD PTC (Positive Temperature Coefficient) |
| Number Sensing Points: | One |
| Number Sensor Terminals: | A/100-2W Series and A/1K-2W Series: Two (Non-Polarity Sensitive) A/100-3W Series and A/1K-3W Series: Three (Polarity Sensitive) |
| Sensor Output @0°C (32°F): | A/100-xW Series: 100 Ohms nominal A/1K-xW Series: 1000 Ohms nominal |
| Sensor Accuracy @ 0°C (32°F): | +/- 0.06% Class A (Tolerance Formula: +/- °C = (0.15°C + (0.002 * t)) where t is the absolute value of Temperature above or below 0°C in °C) 0°C (32°F): +/- 0.15°C (+/- 0.27°F) 50°C (122°F): +/- 0.25°C (+/- 0.45°F) |
| Din Standard Temperature Coefficient: | DIN EN 60751 (IEC 751) 3850 ppm / °C |
| Sensor Stability: | +/- 0.03% after 1000 Hours @ 300°C (572°F) |
| Response Time (63% Step Change): | 8 Seconds nominal |
| Self-Heating Maximum Operating Current: | 100 Ohm RTD: 7 mW/°C (Still Air) 5 mA 1K Ohm RTD: 4 mW/°C (Still Air) 3 mA |
| 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 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 AWG (1.31 mm ²) to 26 AWG (0.129 mm ²) |
| Terminal Block Torque Rating: | 0.5 Nm nominal 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-2W/3W-R/RS/RO: 0.14 lbs. (63.5g) A/1K-2W/3W-RSO: 0.18 lbs. (81.6g) A/1K-2W/3W-R2/R2S/R2O: 0.16 lbs. (72.6g) A/1K-2W/3W-R2SO: 0.20 lbs. (90.7g) A/1K-2W/3W-RSO-RJ6-LCD Series: 0.18 lbs. (81.6g) 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

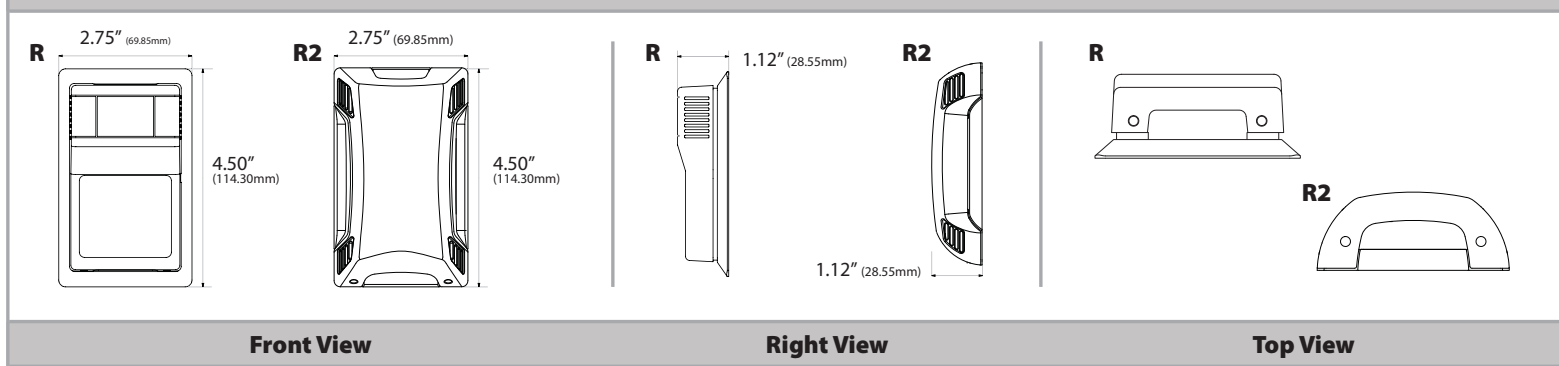


Call: 1-888-967-5224 | Web: www.workaci.com

TEMPERATURE | ##



DIMENSIONAL DRAWING



STANDARD ORDERING

Model # Example: A/100-2W-R -OR- 144136

| Model # | Item # | Description |
|-------------|--------|--|
| A/100-2W-R | 144136 | 100 Platinum RTD (2 Wire), "R" Version, Beige, No Options |
| A/100-2W-R2 | 144138 | 100 Platinum RTD (2 Wire), "R2" Version, White, No Options |
| A/100-3W-R | 144137 | 100 Platinum RTD (3 Wire), "R" Version, Beige, No Options |
| A/100-3W-R2 | 144139 | 100 Platinum RTD (3 Wire), "R2" Version, White, No Options |
| A/1K-2W-R | 144154 | 1K Platinum RTD (2 Wire), "R" Version, Beige, No Options |
| A/1K-2W-R2 | 144156 | 1K Platinum RTD (2 Wire), "R2" Version, White, No Options |
| A/1K-3W-R | 144155 | 1K Platinum RTD (3 Wire), "R" Version, Beige, No Options |
| A/1K-3W-R2 | 144157 | 1K Platinum RTD (3 Wire), "R2" Version, White, No Options |

CUSTOM ORDERING

Model # Example: A/ 1K 2W 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) | 100 = 100 Ohm Platinum RTD 1K = 1K Ohm Platinum RTD | |
| C. Number of Wires Select One (1) | 2W = Two Wires 3W = Three Wires | |
| D. Configuration Select One (1) | R = Room RO = Room with Override RS = Room with Set Point R2 = Room R2O = Room with Override R2S = Room with Set Point R2SO = Room with Set Point and Override | |
| E. 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 | |
| F. LCD Display Select One (1) | ---- = No LCD Display LCD = With LCD Display (Only Available with "R" Style Enclosure) | |
| G. LCD Display Descriptor Select One (1) | F = °F (Fahrenheit) C = °C (Celcius) | |
| H. 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, 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 *: 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) |

