



ROOM

Wall Mount Enclosure, Balco RTD

The ACI Balco 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

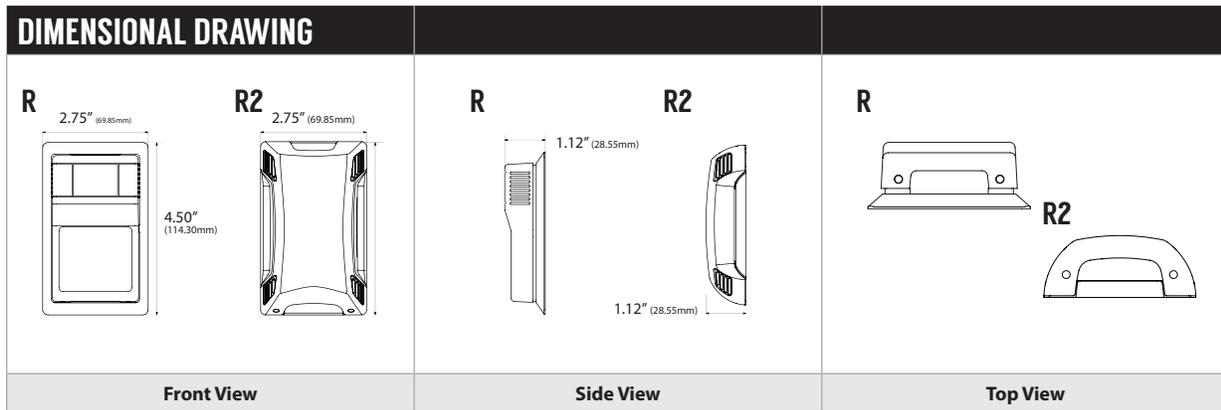
The ACI Balco Room Series is covered by ACI’s Five (5) Year Limited Warranty. The warranty can be found in the front of ACI’s Sensors & Transmitters catalog, as well as on ACI’s web site, workaci.com.

PRODUCT SPECIFICATIONS

Sensor Type Sensor Curve:	Balco RTD PTC (Positive Temperature Coefficient)
Number Temperature Sensing Points:	One
Sensor Output @ 70°F (21.1°C):	1000 Ohms Nominal
Sensor Accuracy:	70°F (21.1°C): +/- 1%
Temperature Coefficient (0-100°C):	4681 ppm/°C
Sensor Stability:	+/- 0.05% after 1000 Hours @ 150°C (302°F)
Response Time (63% Step Change):	8 Seconds Nominal
Maximum Operating Current:	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 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 Options:	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 (0.129 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/BALCO-R/RS/RO Series: 0.14 lbs. (63.5g) A/BALCO-RSO Series: 0.18 lbs. (81.6g) A/BALCO-R2/R2S/R2O Series: 0.16 lbs. (72.6g) A/BALCO-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





STANDARD ORDERING		
Model #	Item #	Description
A/BALCO-R	144158	1K Balco RTD, "R" Version, Beige, No Options
A/BALCO-R2	144159	1K Balco RTD, "R2" Version, White, No Options

CUSTOM ORDERING		MODEL #
A. Sensor Series¹ No Selection Required	A/	A/
B. Model Series Select One (1)	BALCO	BALCO
C. Configuration Select One (1)	R = Room RO = Room with Override RS = Room with Set Point RSO = Room with Setpoint 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 232 = 3.5mm (1/8") Stereo Jack	
E. LCD Display² Select One (1)	---- = No LCD Display LCD ² = With LCD Display (Only Available with "R" Style Enclosure)	
F. LCD Display Descriptor Select One (1)	F = °F (Fahrenheit) C = °C (Celsius)	
G. NIST³ Select One (1)	---- = No NIST Certificate NIST = NIST Certificate (3 Points)	
Setpoint Configuration Options Select Options below if RS, RSO, R2S or R2SO was selected as a Configuration (C)		
1. Slidepots⁴ Select One (1)	Direct Acting (Range in Ohms) A03 = 0 to 10K A09 = 0 to 2K A10 = 0 to 1K A28 = 806 to 1206	
2. Setpoint Indication Select One (1)	A3 = 18-28 DEG C A4 = 20-30 DEG C B4 = 55-85 DEG F B7 = 60-90 DEG F C5 = COOL/WARM C6 = COOLER/WARMER D3 = WARM/COOL G5 = BLUE/RED (R2 Enclosure)	

Note¹: A/ part numbers come without logo. For custom logo, replace A/ with Company abbreviation. Please contact ACI | **Note²:** LCD Display is not compatible with NIST | **Note³:** NIST is available in "R" and "R2" only configurations | **Note⁴:** Other Setpoint configurations are available. Please contact ACI | **Note*:** Short Sensor is factory default, but the Dry Contact option is field selectable with jumper shunts included

ACCESSORIES ORDERING		
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)

