

2-10V Wall Humidity Sensor Installation Instructions

This document covers the operation and installation instructions for the following Condair wall humidity sensor:

Kit No.	Component No.	Description
2597927	1509858	2-10V Wall Humidity Sensor

1 – Mounting and Installation

Location:

Install the Condair CRC-NA in a protected and easy accessible place at least 1.5 m above the floor to the wall (mounting on flush-mounting or wall-mounting box). Observe the following placement notes:

- Do not place Condair CRC-NA in niches, behind, curtains, etc.
- Do not place the Condair CRC-NA near heat sources, within the area with direct air draft or direct sunlight.

Installation:

Refer to installation overview in section 2.

1. Open the screw of the housing and remove the mounting plate.
2. At the place of location fix mounting plate (plastic screw facing downwards) with two screws.
3. Lead connecting label from the bottom into the housing and connect wires to the terminal according to the wiring diagram.
4. Snap housing onto the mounting plate and fix it with screw (do not tighten screw too much).

Note: We recommend using 18-gauge wire, and maximum <100 ft distance from the unit.

2 – Installation overview



CRC-NA
2597927/1509858

A mm (inch)

B

C

D

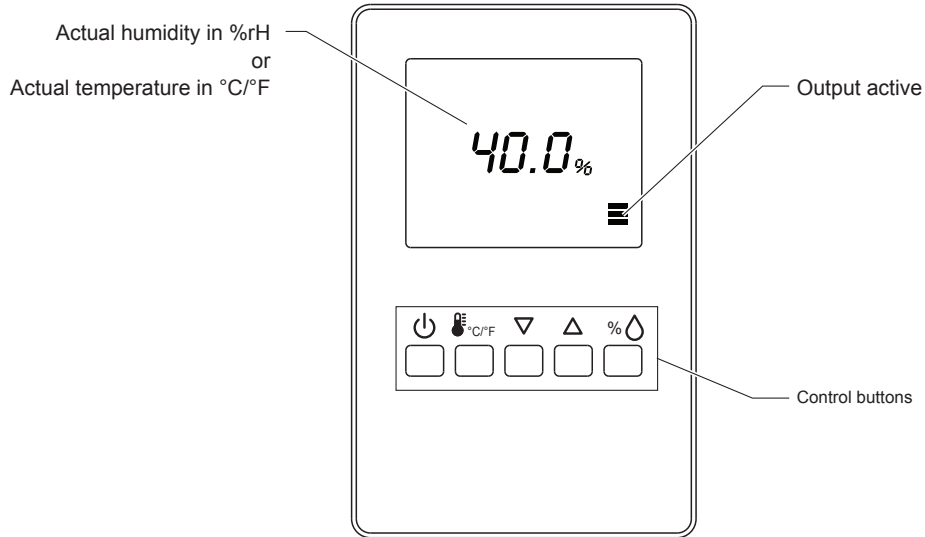
E

	0V / GND	24V	N/A	N/A	N/A	AO 2-10V	N/A	Temp. Reset
1	2	3	4	5	6	7	8	

- 1: 0V / GND
- 2: 24 V AC/DC ±10%
- 3: Do not connect
- 4: Do not connect
- 5: Do not connect
- 6: 2...10VDC
- 7: Do not connect
- 8: Temp. Reset

For Wiring Schematic:
Get the Condair
Sensor Connect App

3 – Wall Sensor LCD Display



Buttons	Operation	Function
⏻	press briefly	Switching On and Off
🌡️ °C/°F	press briefly	Shows temperature value
	press long	Switching between °C and °F
▽ / △	—	—
%💧	press briefly	Shows rH value
	press long	Offset settings

Fig. 1: Wall Humidistat LCD Display and function of control buttons

4 – Sensor Calibration

Sensor inputs can be calibrated if needed

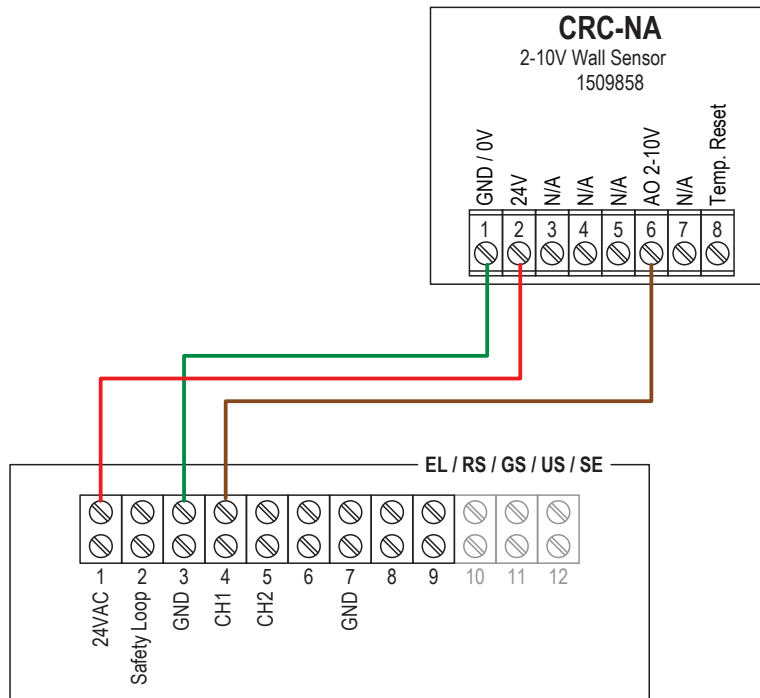
Press %💧 > 2 sec. UI and its value is displayed.	75%
Press %💧: Calibration value and tool symbol is displayed, UP/DOWN to calibrate,	UI 1
Press %💧: Save calibration, tool symbol disappears.	
Press UP key again to step through the next active input	0.0%
Note: disable inputs will not be shown	..UI 1

5 – Product Specification

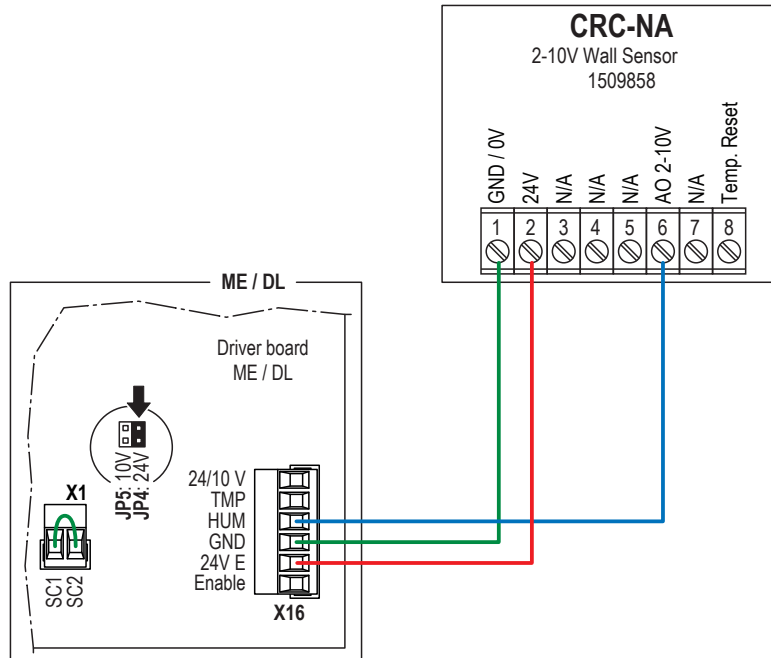
Power Voltage	Operating voltage Power consumption Terminal connection	24 V AC 50/60 Hz \pm 10 %, 24 VDC \pm 10 % Max. 2 VA For wires 0.34...2.5 mm ² (AWG 24...12)
Sensor Probe	Measuring element Range Accuracy Hysteresis Repeatability Stability	Capacitive measuring element 0...100 % RH \pm 2.5 % at 25 °C \pm 1% \pm 0.1% < 0.5% / year
Signal Output	Analog Outputs Output Signal Resolution Maximum Load	A01 DC 2...10 VDC 10 Bit, 9.7 mV, 0.019.5 mA 20 mA, 500 Ω
Display (LCD)	Humidity Values Resolution Setpoint Values	3 digits 0.5 2 digits
Environment	Operation: Climatic Conditions Temperature Humidity	IEC 721-3-3 Class 3 K5 -40...70°C (-40...158°F) <95 % rH not condensing
Standards	CE compliant to EMC Norm 2014/30/ EU, Low Voltage Directive 2014/35/EU Automatic electrical control and regulating devices for domestic use and similar applications Degree of protection according to 60529 Protection class	EN 61 000-6-1/ EN 61 000-6-3 EN 60 730-1 IP30 III (IEC 60536)
General	Housing material Mounting Plate Weight Condair CRC (including packing)	PC and ABS Galvanized steel 160 g (5.6 oz)

6 – Wiring Diagrams

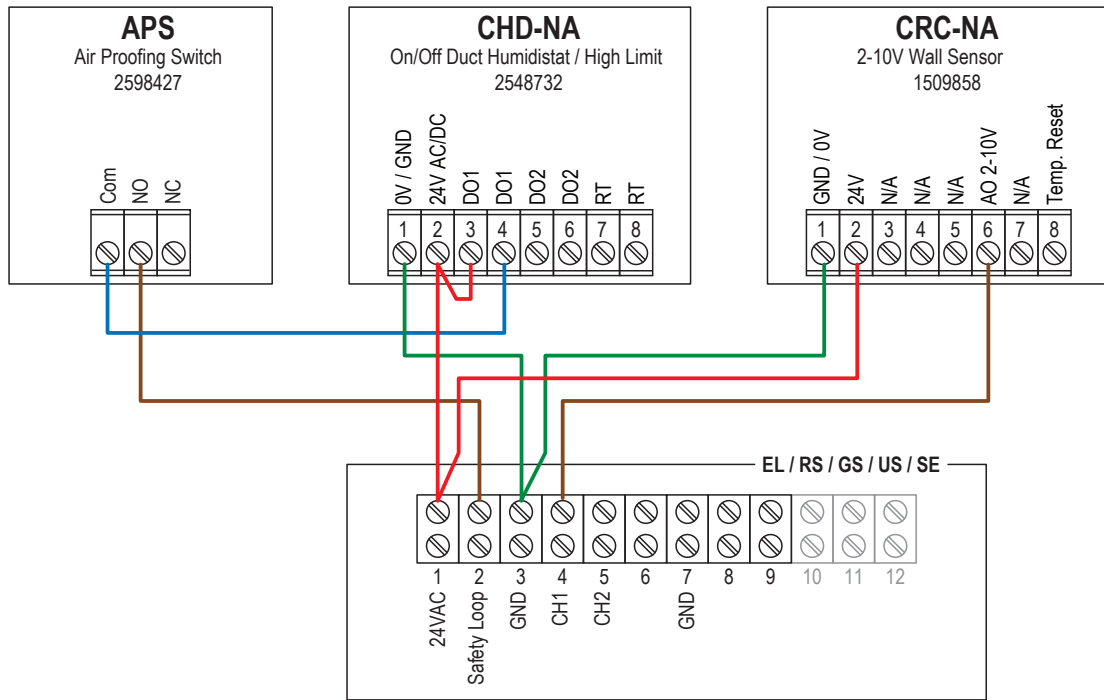
Wiring diagram CRC-NA for RS, EL, GS, US and SE



Wiring diagram CRC-NA for DL and ME



Wiring diagram CRC-NA with CHD-NA and APS for RS, EL, GS, US and SE



Wiring diagram CRC-NA with CHD-NA for DL and ME

