CRH Series

EXECUTIVE HUMIDITY/ TEMPERATURE TRANSDUCER

Description:

The CRH series of Humidity/Temperature Transducers are designed for use with automation, energy management, and process computer control/monitoring systems.
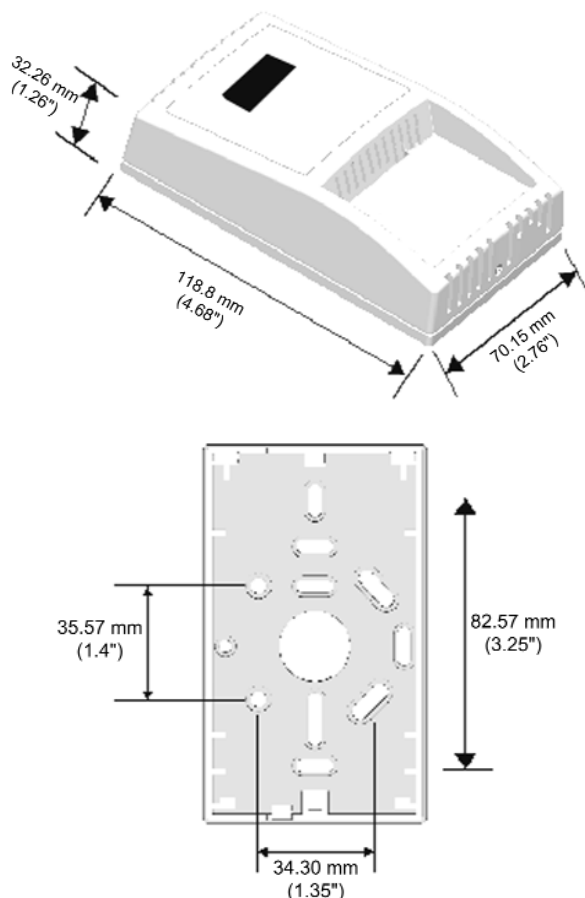
The CRH100 is a precision current loop RH transmitter featuring a three digit LCD indication of the RH signal that is being sent to the control system. The display and output signal are configured to display readings over the entire span of 0 to 100% RH.

The CRH110 is a humidity transmitter with a temperature transmitter. Both readings are displayed on a single LCD.

Features:

- LCD indication
- Highly stable RH sensor element
- Integral zero and span adjustments

- NEW functional and attractive enclosure
- Installer friendly wiring access
- Highest quality double-sided FR4 PCB's

Dimensions:

Specifications:

4-20mA Loop Power Supply.............	18 to 35 Vdc or 18 to 32 Vac (with 250 ohm load and no LCD)
	22 to 35 Vdc or 22 to 32 Vac (with 250 ohm load and LCD)
Minimum Loop Current	2.5 mA nominal
Maximum Loop Current	21.5 mA nominal
Maximum Loop Load	> 600 ohms at 24 Vac/dc with no LCD, > 325 ohms with LCD
Input Voltage Effect	Negligible over specified operating range
RFI Rejection	Good RFI rejection of normal frequencies with standard Installation
Protection Circuitry	Reverse voltage protected and output limited
Output Signal	4-20mA current loop
System Accuracy at 25°C	±3 RH, 5 to 95% RH
Repeatability	±0.5% RH typical
Hysteresis	±1% RH maximum
Linearity	±0.5% RH typical
Sensor Response Time	15 seconds at 25°C in slowly moving air
Stability	±1% RH typical at 50% RH in 5 years
Sensor Type	Thermoset Polymer based capacitive
Display Units	%RH
Display Range	0 to 100% RH
Display Resolution	0.1% RH for display of 00.0 to 99.9
Display Accuracy	±0.5% RH over full range with respect to the output signal
Display Update Rate	3 times per second
Display Size	0.95"W x 0.45" H (24mm x 11mm) three digit
Operating Temperature	0 to 70°C (32 to 158°F)
Operating Humidity	0 to 95% RH (non-condensing)
Wiring Connections	Screw terminal block (14 to 22 AWG)
Manufacturing Process	ISO 9001 Certified
Internal Adjustments	Clearly marked ZERO and SPAN pots
Enclosure Size	2.8" W x 4.7" H x 1.25" D (71mm x 119mm x 32mm)

Ordering Information:

CRH100A032A01 ....Executive Space - Humidity transmitter, 3%RH, 24VAC/DC, Current 4 - 20mA, LCD display

CRH110A03C2A1AF ......Executive Space - Combination Humidity / Temperature transmitter,

3%RH, PT1000-1000 ohms Platinum, IEC 751, 385 Alpha, thin film, 24VAC/DC, Current 4 - 20mA, 32°F-95°F, LCD display