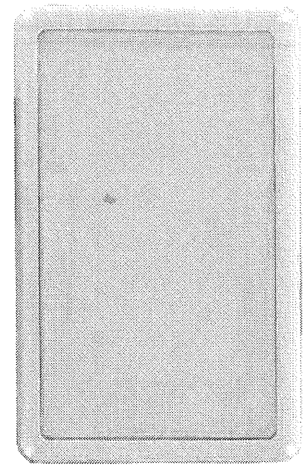
ASM02221
E-BUS Digital Room Temp & Humidity Sensor Installation Sheet



Includes: Sensor, Electronics Mounted in Cover plate, Back plate, Mounting plate, (2) Mounting screws, (1) Allen screw

Overview

The E-BUS Digital Room Sensor is used to sense Space Temperature & Space Humidity. The Sensor is supplied with electronics mounted in a cover plate, a back plate, an optional mounting plate, and (2) mounting screws. An E-BUS cable of required length must be purchased separately.

Environmental Requirements

The E-BUS Digital Room Sensor needs to be installed in an environment that does not exceed a temperature greater than 150°F or less than -30°F and does not exceed 95% relative humidity levels (non-condensing).

Mounting

CAUTION: Do not touch the front face of the sensor while you are plugging in the E-BUS cable. Touching the front face of the sensor while plugging in the cable may prevent proper initialization and keep the buttons on the sensor from working properly.

The E-BUS Digital Room Sensor is designed to be mounted to a vertical 2" x 4" electrical box recessed in the wall. If the wall cannot be penetrated, a plastic surface mount box such as those made by Wiremold™ may be used to mount the sensor to the wall surface. The Sensor should be mounted at least 5 feet above the floor. See **Figure 1** on the next page for dimensions.

The Sensor is mounted by removing the front cover and fastening the housing base to the electrical box using the supplied (2) 6-32 x 1" mounting screws. The E-BUS cable is then plugged into the E-BUS connector located on the circuit board that is mounted on the cover. The cover is then placed onto the housing base, and the Allen Screw on the bottom of the base is adjusted to hold the cover in place.

Optional Mounting Plate

Included with the Digital Room Sensor is a mounting plate that can be used, if necessary, to cover the sensor sheet rock opening. This mounting plate screws onto the back of the housing base. The mounting plate is then mounted and covers the recessed space in the wall.

AAON Controls Support
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For more information, please see the E-BUS Digital Room Sensor Technical Guide, available for download from aaon.com/sensors

Technical Data		**E-BUS Digital Room Temperature & Humidity Sensor**	
Sensor Element	Digital Sensing Device	Accuracy	RH +/-3%, Temp +/- .8°F
Sensor Reading Range	40°F to 120°F RH = 0-100%	Connection	E-BUS
Ambient Temperature Limits	-40°F to 180°F	Weight	3.2 oz.
One Year Warranty		AAON reserves the right to change specifications without notice	

E-BUS Digital Room Sensor Dimensions

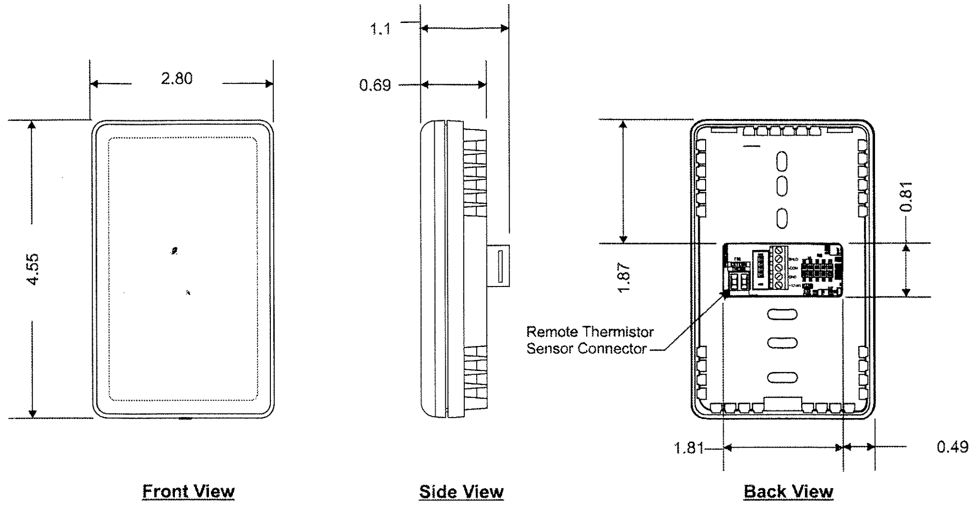

Figure 1: E-BUS Digital Room Sensor Dimensions (in inches)

E-BUS Digital Room Sensor to HVAC Unit Controller Wiring

The E-BUS Digital Room Sensor connects to the VCCX2 or VCB-X Controller with an EBC E-BUS expansion cable (sold separately).

The E-BUS Digital Room Sensor should be mounted at approximately 5 Ft. above the floor on the wall in an area that does not have drafts or is exposed to direct sunlight. See **Figure 2** for wiring details.

The EBC E-BUS cables should not run in conduit with other AC line voltage wiring or with any conductors carrying highly inductive loads.

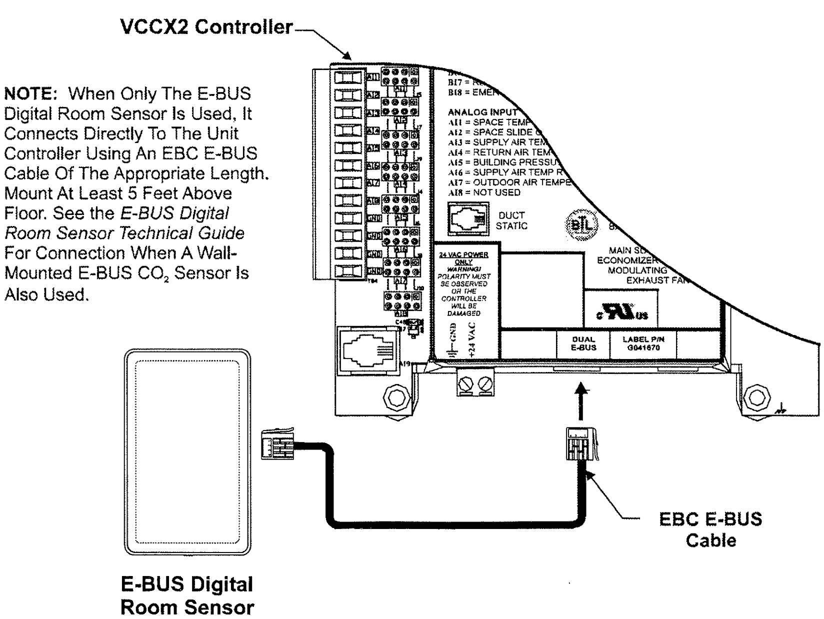

Figure 2: E-BUS Digital Room Sensor Wiring