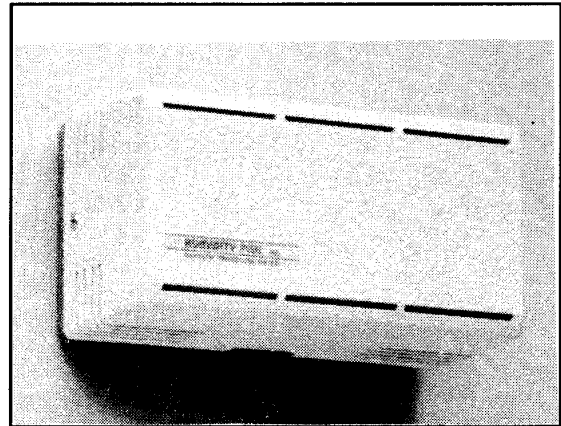


**RELATIVE HUMIDITY TRANSMITTER MODEL:H322****DESCRIPTION**

The model 322 Space Relative Humidity/Temperature transmitter monitors relative humidity in a space environment and generates an output proportional to the humidity. Temperature monitoring is optional. The Model H322 is intended for monitoring and controlling humidity with building automation systems.

The transmitter uses a thin film relative humidity sensor. Standard output is 4 to 20 mA (0 to 100% RH). Voltage outputs are optional. A conformal coating protects the PC board assembly from condensation. Input voltage requirements are 24 VDC.

Either the integrated temperature transmitter or a separate sensor mounted in the enclosure may be selected to monitor temperature. The transmitter uses a LM335 electronic temperature sensor. Standard transmitter output is 4 to 20 mA. Voltage outputs are optional. The separate sensor can be selected from an assortment of thermistors, RTDs, and electronic sensor.

**SPECIFICATIONS****HUMIDITY TRANSMITTER****General**

Accuracy:	+ or - 2% or 3% (includes hysteresis, stability, and linearity)
Hysteresis:	+ or - 3% of RH, 10 to 90 to 10% RH
Stability:	+ or - 2% RH over 24 months typical
Linearity:	+ or - 1% RH typical
Sensing element:	Thin film Gold on Polymer

Temperature Dependence:	Negligible between 32° and 122° F (0° and 50° C)
-------------------------	--

Time Constant:	90 seconds
----------------	------------

Humidity

Range:	0 to 100% RH
--------	--------------

TEMPERATURE TRANSMITTER**General**

Accuracy:	+ or - .5° F (.3° C) + or - .2% of span (includes linearity and calibration error)
-----------	--

Linearity:	+ or - .2% of span typical
------------	----------------------------

Overall Calibration Error:	+ or - .5% F (.3° C) at span midpoint
----------------------------	---------------------------------------

Sensing Element:	LM335 Electronic Sensor
------------------	-------------------------

Time Constant:	15 seconds in slow moving air
----------------	-------------------------------

PHYSICAL

Dimensions:	See outline drawing.
-------------	----------------------

Weight:	5.1 oz
---------	--------

Enclosure:

Material:	High impact polystyrene
-----------	-------------------------

BEC CONTROLS CORP.

WWW.BECCONTROLS.COM

**TEMPERATURE**

Range:	40° to 90° F (4° to 32° C) or custom
--------	--------------------------------------

ELECTRICAL**DC Power Requirement:**

4 to 20 mA and 1 to 5 VDC:	14 (min) to 35 (max) VDC @ 4 to 20 mA for each transmitter
----------------------------	--

0 to 5 VDC:	13 (min) to 35 (max) VDC @ 3 mA for each transmitter
-------------	--

0 to 10 VDC:	15 (min) to 35 (max) VDC @ 3 mA for each transmitter
--------------	--

Signal Output

Current:	4 to 20 mA loop current, 2 wire powered DC; maximum load resistance at 14 VDC is 0 ohms, at 35 VDC is 1050 ohms
----------	---

Voltage:	0 to 5 VDC, 0 to 10 VDC, or custom; minimum load resistance for 0 to 50 VDC is 1K ohms, and for 0 to 10 VDC is 2K ohms
----------	--

ENVIRONMENTAL**Operating:**

Temperature:	-4° to 140° F (-20° to 60° C)
--------------	-------------------------------

Humidity:	0 to 95% RH non-condensing
-----------	----------------------------

Storage:

Temperature:	-4° to 158° F (-20° to 70° C)
--------------	-------------------------------

Humidity:	0 to 95% RH non-condensing
-----------	----------------------------

Medium:

Air:	Free of vapors that attack plastics such as Acetone
------	---



ORDERING INFORMATION:

H322-(Accuracy)-(Output)-(Temperature Option)-(Custom Temperature Range)-(Power)

Accuracy

(2) + or - 2% over 0 to 100% RH

(3) + or - 3% over 0 to 100% RH

Output

4 to 20 mA

W 1 to 5 VDC

X 0 to 5 VDC

Y 0 to 10 VDC

Z Specify other

Temperature Option

TH21 Precon Type II, Model 21, 2252 ohms Thermistor

TH22 Precon Type II, Model 22, 3000 ohms Thermistor

TH24 Precon Type II, Model 24, 10,000 ohms Thermistor

TH27 Precon Type II, Model 27, 100,000 ohms Thermistor

TH3 Precon Type III, Model 3, 10,000 ohms Thermistor

THB 100 ohms Platinum Film RTD

TYD 1000 ohms Platinum Film RTD

THE 2000 ohms BALCORTD

THL 2000 ohms Silicon RTD

THI Electronic Sensor Temperature to Voltage LM335

THF Electronic Sensor Temperature to Current LM334

TR Temperature Transmitter

TRC Temperature Transmitter, Custom Range

Power

24 VDC

Notes: 1. if an optional feature is not ordered, omit the designator in the order number.

Examples:

H322-3-THB = + or - 3%, 0 to 100% RH, 4 to 20 mA Output, 100 ohms Platinum Film RTD, 24 VDC Input Power

