

THE-1105

Humidity Transmitter with Temperature Sensor

Application and Description

The THE-1105 can be wall-mounted in vertical or horizontal installations for building automation systems requiring accurate monitoring of humidity and temperature. It transmits separate relative humidity (RH) and temperature signals for use in temperature, humidity, or enthalpy-based control applications. Environmentally rugged, it is suitable for hospitals, laboratories, and swimming pool areas.

This transmitter uses a silicon CMOS chip sensor (providing much more durable and reliable performance than older capacitive polymer sensors). It responds within seconds to changes in humidity with a very high degree of accuracy.

For humidity readings, the THE-1105 has two user-selectable output ranges: 0 to 5 or 0 to 10 VDC (scaled over 0 to 100% RH range).

The THE-1105 also contains a thermistor for measuring room temperature. The Type II 10,000 ohm (@ 77° F) thermistor provides precise, stable temperature sensing.

Features

- Transmits separate temperature and humidity signals
- CMOS chip humidity sensor provides excellent linearity, sensitivity, and reliability with userselectable output ranges
- ◆ Type II 10,000 ohm thermistor for temperature sensing
- ◆ Light almond (HPO-1501) cover (included)
- ◆ Can be mounted on a 2 x 4 electrical box (using an HMO-50xx mounting plate kit) or to a hollow wall (using an HMO-5001 or HMO-5023—see the Accessories section)

Specifications

Supply Voltage 24 VAC (-15%/+20%), Class 2

Only

Supply Power 0.84 VA at 24 VAC



Humidity Element

Output Range 0 to 100% RH

Sensing Accuracy ±2% RH over the 10 to 90%

RH range @ 77° F (25° C)

Output Signal 0 to 5 VDC or 0 to 10 VDC

(over 0 to 100% RH), capable

of driving 1000 ohms or

greater

Temperature Sensor

Type Type II thermistor Accuracy $\pm 0.36^{\circ}$ F ($\pm 0.20^{\circ}$ C)

Resistance 10,000 ohm @ 77° F (25° C)

NTC 4.37%/° C @ 25° C

Dissipation Constant 2 mW/° C

Wire Size 18 to 22 AWG with a max. 250-

foot length

Material

Base Black ABS

Cover Light almond flame-retardant

plastic

Weight 3.0 oz. (85 grams)

Approvals SASO PCP Registration KSA

R-103260

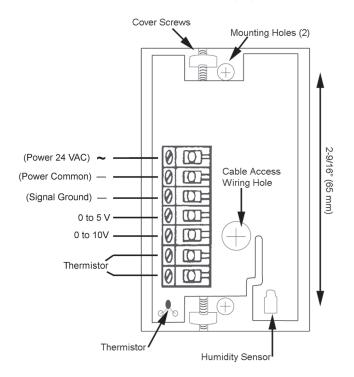
Temperature Limits

Operating 40 to 120° F (4 to 49° C)
Shipping –40 to 140° F (–40 to 60° C)
Humidity 0 to 100% relative humidity,

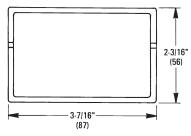
non-condensing

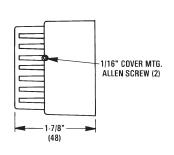
Details

All dimension are in inches (mm).









Accessories

Covers (Replacement/Substitute)

HPO-0044	Replacement
	cover screws
HPO-1501	Replacement light almond ABS cover
HPO-1502	White ABS cover
HPO-1503	Brushed alumi-
	num metal cover



Mounting

HMO-5001 Dual toggle bolts for mounting on hollow walls

HMO-5023 Mounting strap for mounting on hollow walls

for mounting or hollow walls, includes 2 #6-32 x 2 inch screws and "template" printed on envelope

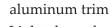




Mounting Plate Kits

(For mounting to 2 x 4 handy box, with screws and decorative matching plate)

HMO-5024	Light almond with aluminum trim
HMO-5026	White with



HMO-5030 Light almond HMO-5031 White

Transformers (24 VAC, Class 2)

XEE-6111-040 40 VA, single-hub XEE-6112-040 40 VA, dual-hub





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