

# ECON-ZIP-TH

ZIP Economizer™ Temperature and Humidity Sensor



## Technical Data

Power Supply	24 VAC ± 20%, 50/60Hz, Class 2 power source
Current Consumption	Max. 5mA
Rated Impulse Voltage	800V
Connectors	1/4" male spade connectors
Environmental	RoHS conformally coated
Software Class	A
Control Pollution Degree	3
Temperature Sensor Type	NTC 10kOhm
Humidity	0 to 100% RH
Humidity Sensor Type	0-10VDC (0 to 100% RH) max load 10kOhm, Class 2 limited energy
Housing	NEMA 1
Ambient Temperature Range	-40°F to +140°F (-40°C to +60°C)
Storage Temperature Range	-40°F to +158°F (-40°C to +70°C)
Accuracy	± 3% 35-65% rH @ 75°F ± 5% 0-34%, 66-100% rH @ 75°F
Response Time	<45 seconds @ 40 FPM, 75°F
Hysteresis	<2.5% rH
Long Term Stability	<1% rH/year
Agency Listing	UL60730-1,-2-9,-2-13. UL2043 compliant, CE 2004/108/EC "Electromagnetic compatibility (EMC)", EN60730-1,-2-9 and-2-13

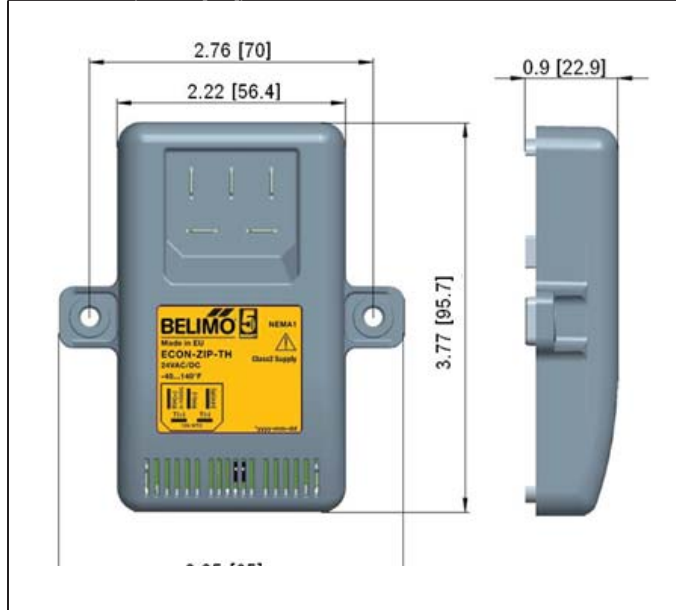
## Product Features

- Temperature and humidity sensor in the same footprint
- Reliable and accurate
- 0-10VDC output to relative humidity
- NTC 10kOhm temperature sensor
- Large operating range: -40°F...140°F; 0-100% RH

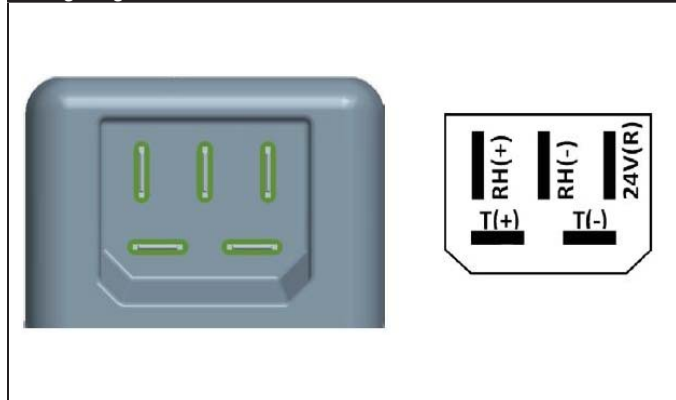
## Application

ECON-ZIP-TH Sensor may be used to measure temperature and humidity in the outdoor air or return air location. The temperature and humidity output is via 2 discrete channels that can be independently measured with a multimeter. One sensor is used in the outdoor air intake for single enthalpy changeover strategy. An additional sensor can be added in the return air stream for differential changeover strategy. When using the ECON\_ZIP\_TH it is not necessary to use a separate temperature sensor ECON-ZIP-10K for OAT or RAT.

## Dimensions (Inches [cm])



## Wiring Diagram



P10403 - 02/13 - Subject to change. © Belimo Aircontrols (USA), Inc.