

HE-67xx Series

TRUERH™ Humidity Element with Temperature Sensor



TrueRH™ Series HE-67xx

Description

The TrueRH™ Series HE-67xx humidity transmitter with temperature sensor offers dependable technology, ease of installation, and application flexibility in an attractively styled wall mount package. The patented All-Polymer™ humidity sensor construction improves resistance to chemical corrosion. The element measures humidity within either ±2% or ±3% accuracy, and generates a voltage signal proportional to 0 to 100% Relative Humidity (RH).

Johnson Controls designed the HE-6700 Series humidity transmitter with temperature sensor to use with most controllers. It works directly with the VMA1200 and VMA1400 Series controllers. An additional thin-film nickel or thin-film platinum temperature sensor adapts the unit for zone enthalpy control applications. TrueRH products feature patented circuitry and calibration improvements.

Features

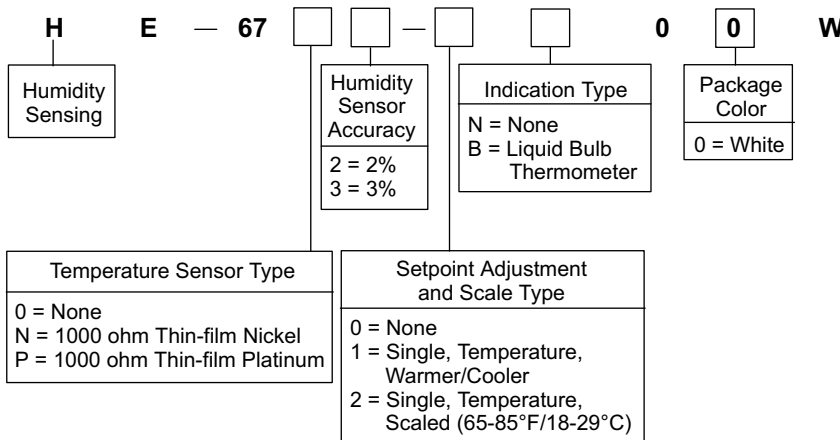
- meets National Institute of Standards and Technology (NIST) traceable calibration standards for calibration testing, verifying, and auditing
- time response improvement enhances local temperature control, increases employee comfort, and reduces energy consumption
- controller configuration switch displays the controller's current operating mode

- setpoint adjustment (optional) allows the user to adjust room comfort and to choose occupancy features that match the application and controlled
- manual override pushbutton (PB) signals the controller that the space is occupied in order to override time-of-day setback
- globally scaled unit includes setpoint and bulb indicator (both optional) with Fahrenheit and Celsius ranges, 65 to 85°F (19 to 29°C)
- universal mounting provided: U.S. wallbox and surface mounting base and all installation hardware included

To Order

To order a sensor, accessory, or replace an existing product, contact the nearest Johnson Controls representative. Specify a code number from the selection chart. Not all possible combinations are available.

Selection Chart



Note: All models have the manual override PB and a functioning LED display.

Example: To order a nickel sensor with a warmer/cooler temperature setpoint, and a liquid bulb thermometer, specify Product Code Number HE-67N3-1B00W.

Note: Not all models available.

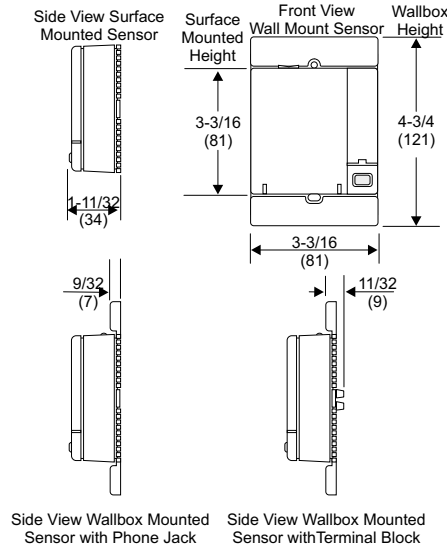
Accessories

Code Number	Description
ACC-DWCLIP-0	Drywall Clip Mounting Kit (10 per bag)
ACC-INSL-0 (a)	Wallbox Mounting Pad (10 per bag)
ACC-INSL-1 (a)	Surface Mounting Pad (10 per bag)
GRD10A-608	Plastic Guard with Baseplate and Mounting Ring
T-4000-119	Allen-Head Adjustment Tool (30 per bag)
TE-67L-600	Fahrenheit Label Replacement Kit
TE-67L-601	Celsius Label Replacement Kit
TE-67MB-600	Mounting Base Kit
TE-67D0-601 (b)	Door Replacement Kit with Johnson Controls Logo
TE-67D0-602 (b)	Door Replacement Kit without a Logo

(a) These foam pads will help prevent drafts from entering the unit through the wall, and make installation easier when mounting on an uneven surface.

(b) Contains 10 original and 10 new style doors.

HE-67xx Series TrueRH™ Humidity Element with Temperature Sensor (Continued)



HE-67xx Dimensions, in. (mm)

Specifications

TrueRH Series HE-67xx Humidity Transmitter with Temperature Sensor	
Power Requirements	14 to 30 VDC or 20 to 30 VAC at 50/60 Hz, Class 2
Current Draw	3 mA with no load, 25 mA maximum
	Signal 0 to 10 VDC
Humidity Element Characteristics at 77°F (25°C)	Accuracy HE-67x2: ±2% RH for 20 to 80% RH at 77°F (25°C) ±4% RH for 10 to 20% and 80 to 90% RH at 77°F (25°C) HE-67x3: ±3% RH for 20 to 80% RH at 77°F (25°C) ±5% RH for 10 to 20% and 80 to 90% RH at 77°F (25°C)
	Temperature Coefficient -0.1 to 0.05% RH/°C at 5°C (41°F) to -0.07 to -0.21% RH/°C at 65°C (149°F)
	Temperature Sensor 1,000 ohm thin-film nickel
Nickel Sensor	Temperature Coefficient Approximately 3 ohms per F° (5.4 ohms per C°)
	Reference Resistance 1,000 ohms at 70°F (21°C)
	Accuracy ±0.34F° at 70°F (±0.18C° at 21°C)
Platinum Sensor	Temperature Sensor 1,000 ohm thin-film platinum
	Temperature Coefficient Approximately 2 ohms per F° (3.9 ohms per C°)
	Reference Resistance 1,000 ohms at 32°F (0°C)
	Accuracy ±0.65F° at 70°F (±0.36C° at 21°C)
Sensor Response Time (for both temperature sensors)	One time constant = 8 ±2 minutes at 10 feet per minute (fpm) airflow rate
	Type Single setpoint
Temperature Set-point (Depending on option chosen)	Scale (Range) Red/blue visual scale (warmer/cooler) Graduated 5F° scale (65 to 85°F) Graduated 2C° scale (19 to 29°C)
	Resistance Nominal 1.5k ohm range
Electrical Connections	18 to 24 AWG wire for 9-position terminal block
Zone Bus Access	6-pin connector with front access for a laptop with HVAC PRO™ software, a Palm™ compatible handheld device with Variable Air Volume Modular Assembly Balancing Tool software, or a Zone Terminal
Manual Override	Integral momentary PB (DIP switch selectable)
LED Display	Red LED indicates three modes of operation (application and controller dependent)
Ambient Operating Conditions	32 to 131°F (0 to 55°C) 0 to 100% RH, noncondensing; 85°F (29°C) maximum dew point
Ambient Storage Conditions	-40 to 140°F (-40 to 60°C) 0 to 100% RH, noncondensing; 85°F (29°C) maximum dew point
Mounting Style	Standard base for both surface or standard U.S. wallbox mounting, including hardware
Materials	White plastic case and mounting base
Dimensions (H x W x D)	3.2 x 3.2 x 1.4 in. (81 x 81 x 36 mm)